



Parts Manual

Performance you rely on.™



Generator Set

JC (Spec A-AB)

INDEX

INTRODUCTION	2
GENERATOR SET DATA TABLE	2, 2A
STANDARD PARTS SECTION	
Base, Oil	12
Block, Cylinder	4
Camshaft	6
Carburetor Parts	
Spec A Through Q	18
Begin Spec R	19
Choke	20
Control	38
Crankshaft	7
Distributor Parts	27
Exciter, Generator - Spec A Through Z	32
Exhaust System	21
Flywheel	7
Fuel System (Gasoline)	16
Gearcase	13
Generator	
Spec A Through Z	30
Begin Spec AA	36
Governor	14
Head, Cylinder	8
Heater, Carburetor Air - Begin Spec P (Gasoline Sets)	15
Housing, Air	28
Ignition System	22
Oil System	10
Piston and Rod	3
Regulator, Voltage - Begin Spec AA	40
Service Kits and Miscellaneous	41
Starter	24
Starter Parts	25
SPECIAL PARTS SECTION - Pennsylvania Approved Sets	
Base, Oil - Begin Spec K	44
Control - Spec A through Z	44
Crankshaft - Spec A Through Q	42
Flywheel - Spec A Through Q	42
Fuel System (Gas, Gas-Gasoline and LPG)	44
Gearcase - Spec A Through Q	42
Starter - Spec A Through Q	42
Starter Parts - Spec A Through Q	43
OPTIONAL PARTS SECTION	
Cleaner, Air	
Contractor	47
Oil Bath	46
Control, Switchboard (Unhoused Sets)	64
Cooling, Vacu-Flo	53
Duct, Air	55
Duct and Shutter, Air (Housed Sets)	56
Filter, Voltage Regulator	61
Fuel System (Gas, Gas-Gasoline and LPG)	50
Fuel System (LPG and Natural Gas)	51
Heater, Carburetor Air - Spec A through N (Gasoline Sets)	60
Housing and Skid Base	58
Miscellaneous Optional Parts	
Filter Oil (Heavy Duty)	66
Heater	
Generator Space - Begin Spec AA	66
Oil Base	66
Muffler, Critical (Housed Sets)	66
Switch	
Low Oil Pressure	66
Overspeed	66
Vacuum - Begin Spec B (Gas and Gas-Gasoline Sets)	66
Thermostat, Low Engine Temperature	66
Panel, AC Meter (Housed Sets)	62
Skid and Battery Rack	60
Switch, High Air Temperature	52
Tank	
Day	48
Fuel (Housed Sets)	49

Introduction

This catalog applies to the standard JC Generator Sets as listed in the Generator Set Data Table. Parts are arranged in groups of related items and each illustrated part is identified by a reference number corresponding to the same reference number in the parts list. Unless otherwise mentioned in the description or page heading, parts are interchangeable between models. Parts illustrations are typical. Using the model and specification number from your generator set nameplate, select parts that apply to your set. Left and right sides are determined by facing the engine end (front) of the set.

Generator Set Data Table

MODEL AND SPECIFICATION	ELECTRICAL DATA				
	WATTS	VOLTS	HERTZ	WIRE	PHASE
10.0JC-3CR/*	10,000	120/240	60	**	1
10.0JC-4R/*	10,000	120/208	60	4	3
10.0JC-4XR/*	10,000	277/480	60	4	3
10.0JC-5DR/*	10,000	120/240	60	4	3
12.5JC-3CR/*	12,500	120/240	60	**	1
12.5JCJ#	12,500	120/240	60	**	1
12.5JC-3R/*	12,500	120/240	60	3	1
12.5JCB#	12,500	120/240	60	3	1
12.5JC-4R/*	12,500	120/208	60	4	3
12.5JCC#	12,500	120/208	60	4	3
12.5JC-4XR/*	12,500	277/480	60	4	3
12.5JCG#	12,500	277/480	60	4	3
12.5JC-5DR/*	12,500	120/240	60	4	3
12.5JCD#	12,500	120/240	60	4	3
12.5JC-9XR/*	12,500	347/600	60	4	3
12.5JCH#	12,500	347/600	60	4	3
12.5JC-18R/*	12,500	@	60	12	3
12.5JCL#	12,500	@	60	12	3
12.5JC-53CR/*	12,500	120/240	50	**	1
12.5JC-53R/*	12,500	120/240	50	3	1
12.5JC-55DR/*	12,500	120/240	50	4	3
12.5JC-57R/*	12,500	220/380	50	4	3
12.5JC-57XR/*	12,500	240/416	50	4	3
12.5JC-518R/*	12,500	@	50	12	3
12.5JCZ#	12,500	@	50	12	3
15.0JC-1R/	15,000	120	60	3	1
15.0JC-3CR/*	15,000	120/240	60	**	1
15.0JCJ#	15,000	120/240	60	**	1
15.0JC-3R/*	15,000	120/240	60	3	1
15.0JCB#	15,000	120/240	60	3	1
15.0JC-4R/*	15,000	120/208	60	4	3
15.0JCC#	15,000	120/208	60	4	3
15.0JC-4XR/*	15,000	277/480	60	4	3
15.0JC-5DR/*	15,000	120/240	60	4	3
15.0JCD#	15,000	120/240	60	4	3
15.0JC-9XR/*	15,000	347/600	60	4	3
15.0JCH#	15,000	347/600	60	4	3
15.0JC-18R/*	15,000	@	60	12	3
15.0JCL#	15,000	@	60	12	3
10JC-53R17/*†	10,000	120/240	50	**	1
12JC-3R17/*†	12,500	120/240	60	**	1
(These are X-ray models and are identified by the number 17 in the model.)					
PENNSYLVANIA APPROVED SETS	These sets are recognized by the numbers 30 (Gasoline Fuel), 31 (Gaseous Fuel), or 131 (Liquified Petroleum Fuel) appearing in the model just before the diagonal line (/). (Example: 15.0JC-18R31/1AA). For replacement parts, refer first to the Special Parts Section for Pennsylvania Approved Generator Sets. Parts not in that section refer to the Standard Parts Section. When referring to the Standard Parts Section reference to Specification Letter and Voltage also applies to these sets.				

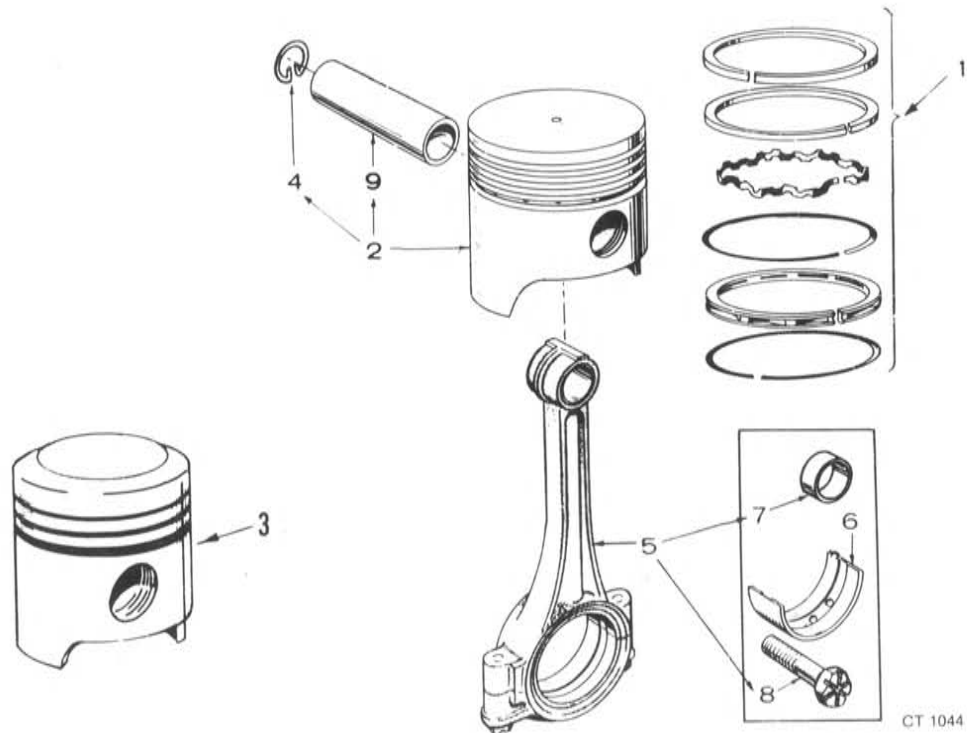
NOTE: Prior to 1969 production, a V was used in the model to designate sets with Vacu-Flo cooling and the C designation (3CR, 53CR, etc.) was not used in the models. Also, the model designation did not use a decimal in the KW rating (EXAMPLE: 12.5JC was formerly 12JC (12-1/2 KW) and 15.0JC was formerly 15JC).

- ** - These generators have four load wires which are reconnectible for 120 volt, 2 wire service or 240 volt, 2 wire service or 120/240 volt, 3 wire service.
- @ - Broad range reconnectible sets, refer to connection diagram inside outlet box cover.
- * - Spec A through May, 1988 Spec AB production, the diagonal line (/) in the model and specification number separates generator set characteristics from the specification number and letter(s). The specification number denotes customer requested options or deviations from a standard (1A, 1B...1AA, 1AB) model. The specification letter advances (A to B, B to C...Z to AA, AA to AB) with major manufacturing changes.
- # - Beginning with April, 1988 JC generator production during Spec AB, the complete model identifying characters changed. The dash (-), the diagonal line (/) and the first letter (A) of the double letter following the specification number are no longer used. Also, a letter is now used in the model to indicate the voltage code and replaces the corresponding number(s) and letter(s) designation as listed in the Generator Set Data Table (EXAMPLE: Code 3CR is now J; Code 4R is now C). Listed below are Spec AB samples of two variations of the identical generator set showing the change in model identifying characters:
 - 12.5JC-3CR/12927AB ... Used prior to April, 1988 production - number and letters (3CR) are used for voltage code. Order Spec AB service parts as shown in this catalog.
 - 12.5JCJ12927B Used beginning with April, 1988 production - the dash, diagonal line and the letter A are no longer used. In this sample, a letter (J) is used for the voltage code. To order service parts, add the letter A between the specification number and letter making it Spec AB and order service parts as shown in this catalog.

STANDARD PARTS SECTION

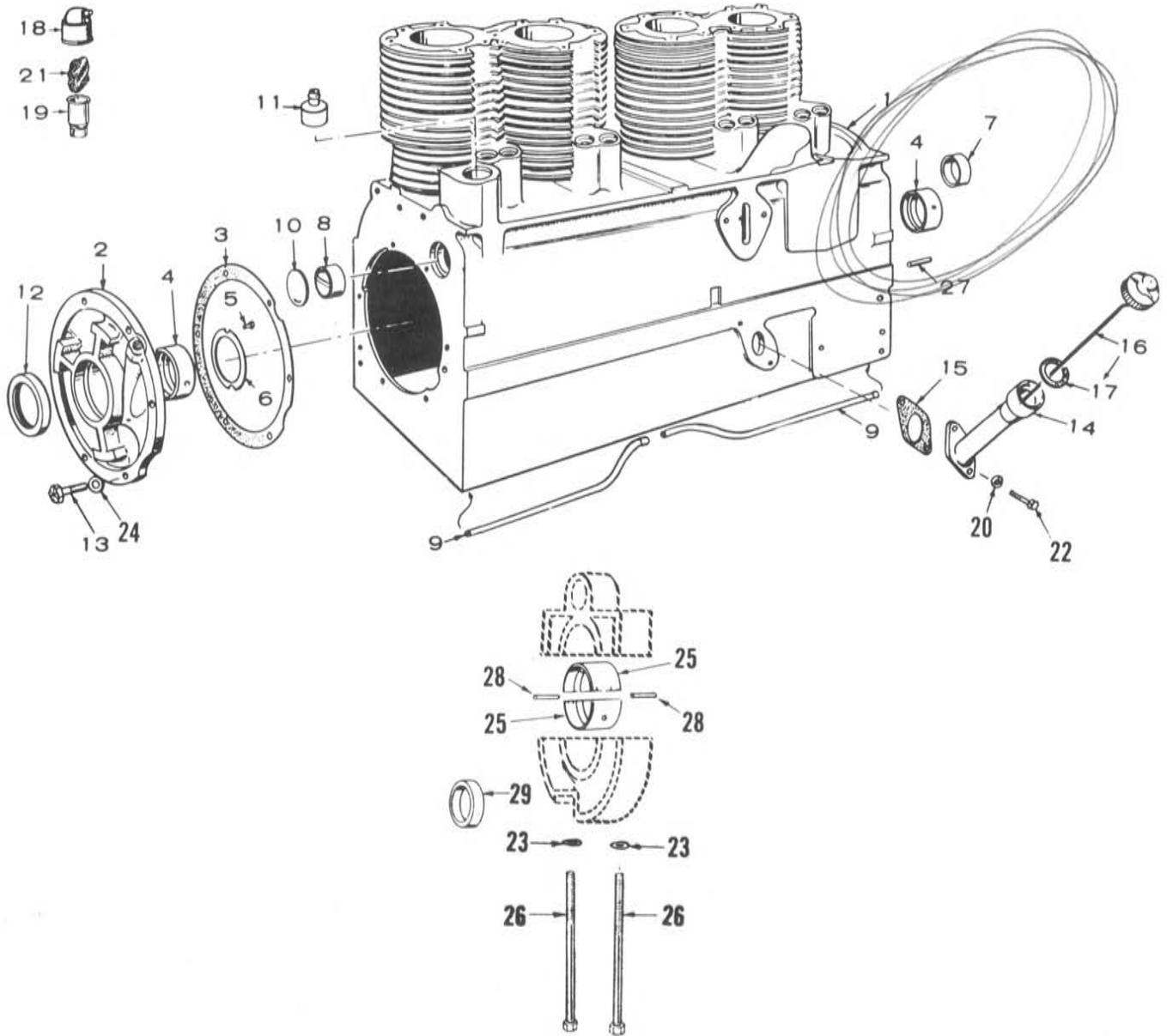
This section contains standard parts applicable to models listed in the generator set data table.

PISTON AND ROD



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	RING SET, PISTON		
	113-0107	4	Standard
	113-0107-10	4	.010" Oversize
	113-0107-20	4	.020" Oversize
	113-0107-30	4	.030" Oversize
2	PISTON KIT (Includes Pin and Retaining Rings)		
	Gasoline, Gas-Gasoline, LPG and Standard Natural Gas Sets		
	112-0172	4	Standard
	112-0172-10	4	.010" Oversize
	112-0172-20	4	.020" Oversize
	112-0172-30	4	.030" Oversize
3	Natural Gas Sets With High Compression Pistons		
	112-0174	4	Standard
	112-0174-10	4	.010" Oversize
	112-0174-20	4	.020" Oversize
	112-0174-30	4	.030" Oversize
4	112-0085	8	Ring, Retaining
5	114-0163	4	Rod Assembly, Connecting
6	BEARING HALF, CONNECTING ROD		
	114-0164	8	Standard
	114-0164-02	8	.002" Undersize
	114-0164-10	8	.010" Undersize
	114-0164-20	8	.020" Undersize
	114-0164-30	8	.030" Undersize
7	114-0170	8	Bushing Half, Piston Pin - Connecting Rod
8	805-0012	8	Bolt, Place (Special)
9	112-0086	4	Pin, Piston

CYLINDER BLOCK



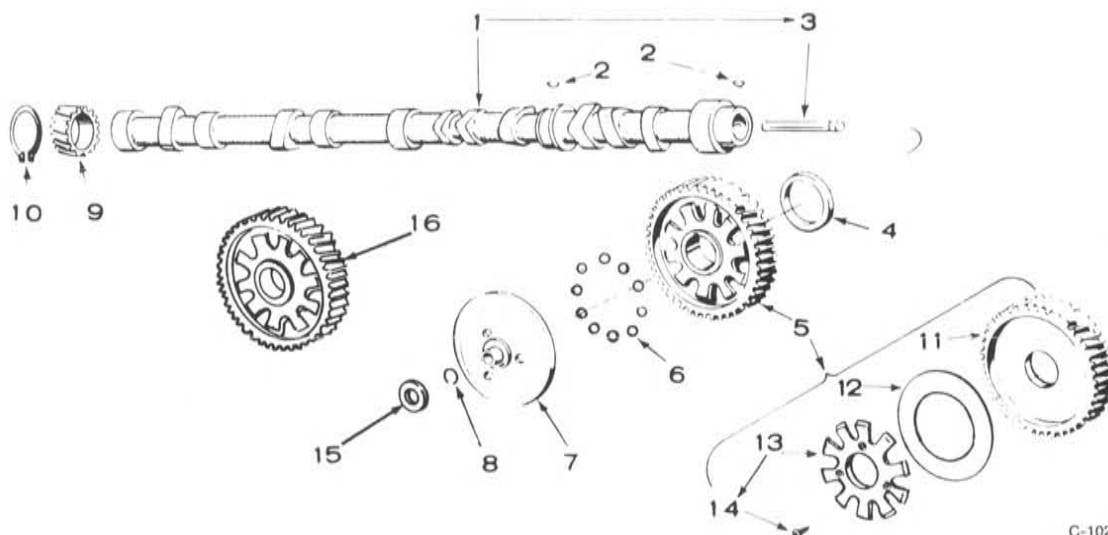
CYLINDER BLOCK

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	110-1328	1	Block Assembly, Cylinder (Includes Tappets and Parts Marked *)
2	101-0337	1	*Plate, Rear Bearing
3	101-0386	1	*Gasket and Shim Kit, Rear Bearing Plate - Kit Includes Bearing Plate Mounting Washers
4	BEARING, MAIN - FRONT AND REAR		
	101-0359	2	*Standard
	101-0359-02	2	.002" Undersize
	101-0359-10	2	.010" Undersize
	101-0359-20	2	.020" Undersize
	101-0359-30	2	.030" Undersize
5	516-0072	4	*Screw, Drive - Crankshaft Thrust Washers
6	104-0420	2	*Washer, Crankshaft Thrust
7	101-0363	1	*Bearing, Camshaft - Front
8	101-0365	1	*Bearing, Camshaft - Rear
9	*TUBE, CRANKCASE OIL		
	120-0586	1	Front
	120-0585	1	Rear
10	517-0053	1	*Plug, Expansion - Rear Camshaft Opening
11	123-1168	1	*Cap, Breather - Begin Spec T
12	509-0086	1	Seal, Crankshaft - Rear
13	805-0019	6	*Bolt, Rear Bearing Plate (Special)
14	123-0649	1	Tube, Oil Fill

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
15	123-0667	1	Gasket, Oil Fill
16	123-0698	1	Cap & Indicator
17	123-0191	1	Gasket, Cap
18	CAP, BREATHER TUBE		
	123-0458	1	Spec A through H
	123-0787	1	Spec J through S
19	123-0645	1	*Tube, Breather - Spec A through S
20	850-0045	2	Washer, Lock - Spring (5/16")
21	123-0865	1	Filter, Breather Tube - Spec A through S
22	800-0026	2	Screw, Cap - Hex Head (5/16-18 x 3/4")
23	526-0035	2	*Washer, Flat (17/32 ID x 7/8 OD x 1/8" Thk)
24	526-0245	6	Washer, Flat (.391 ID x .625 OD x .010 Thk)
25	BEARING HALF, MAIN - CENTER		
	101-0361	2	*Standard
	101-0361-02	2	.002" Undersize
	101-0361-10	2	.010" Undersize
	101-0361-20	2	.020" Undersize
	101-0361-30	2	.030" Undersize
26	101-0342	2	*Bolt, Center Bearing Housing
27	516-0141	2	*Pin, Gearcase Locating
28	516-0149	2	*Pin, Center Bearing Housing
29	101-0364	1	*Bearing, Camshaft - Center

* - Parts Included in 110-1328 Cylinder Block Assembly.

CAMSHAFT



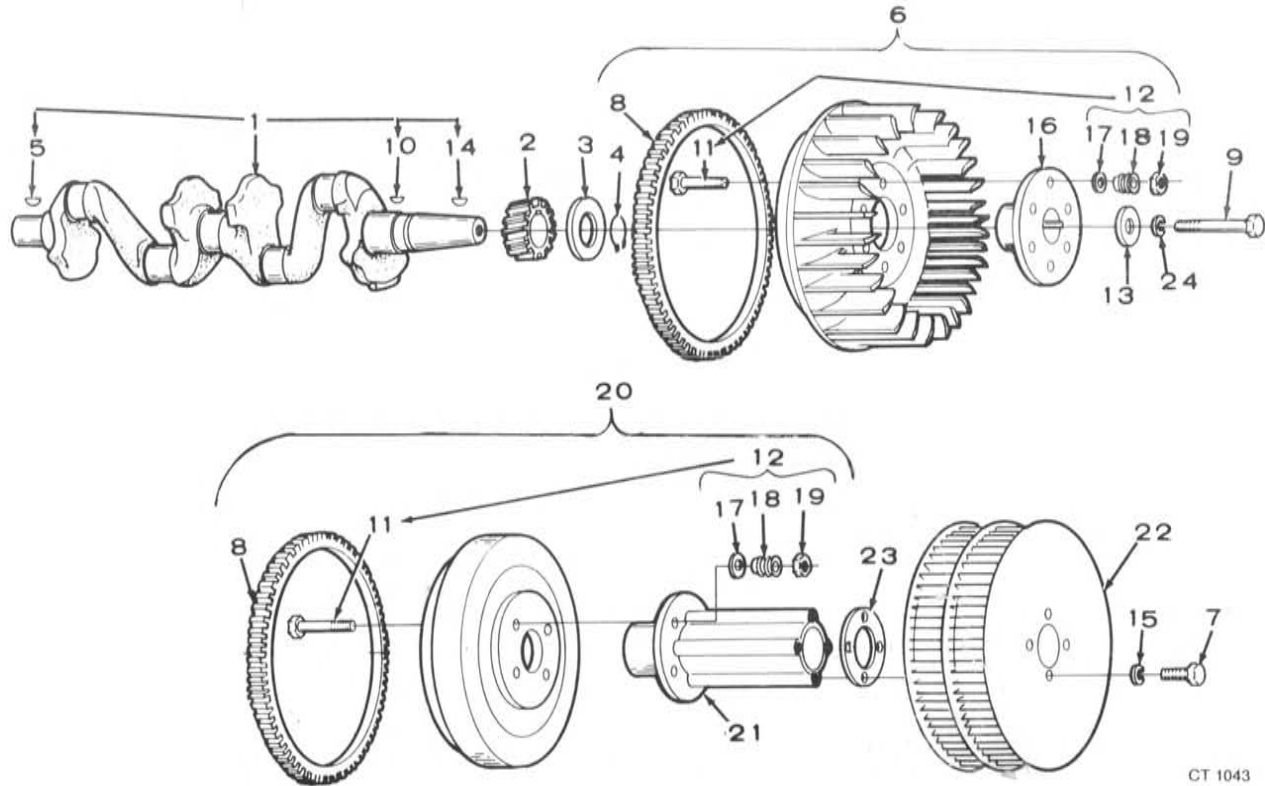
C-1029-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	CAMSHAFT (Includes Center Pin)		
	105-0240	1	Spec A through N
	105-0275	1	Begin Spec P
2	515-0001	2	Key, Camshaft Gear and Distributor Drive Gear
3	150-0075	1	Pin, Center
4	105-0205	1	Washer, Thrust
5	105-0218	1	Gear Assembly, Camshaft - Begin Spec B (Includes Parts Marked *)
6	FLYBALL, GOVERNOR		
	510-0046	12	Spec A
	510-0046	10	Begin Spec B
7	150-0857	1	Cup, Governor
8	150-0078	1	Ring, Center Pin
9	166-0302	1	Gear, Distributor Drive
10	518-0195	1	Ring, Distributor Drive Gear
11	105-0465	1	*#Gear, Camshaft - Begin Spec B
12	150-0773	1	*#Plate, Governor Flyball - Begin Spec B
13	150-1842	1	*#Spacer Kit, Governor Flyball - Begin Spec B (Includes Mounting Screws)
14	815-0506	3	*Screw, Spacer Mounting (Special) Begin Spec B
15	150-0859	1	Washer, Thrust - Governor Yoke - Begin Spec B
16	105-0223	1	Gear, Camshaft (Includes Spacer and Plate) Spec A

* - Parts Included in 105-0218 Camshaft Gear Assembly.

- Camshaft Gear Assemblies With Rivets, Begin Spec B, Order 105-0218 Camshaft Gear Assembly.

CRANKSHAFT AND FLYWHEEL



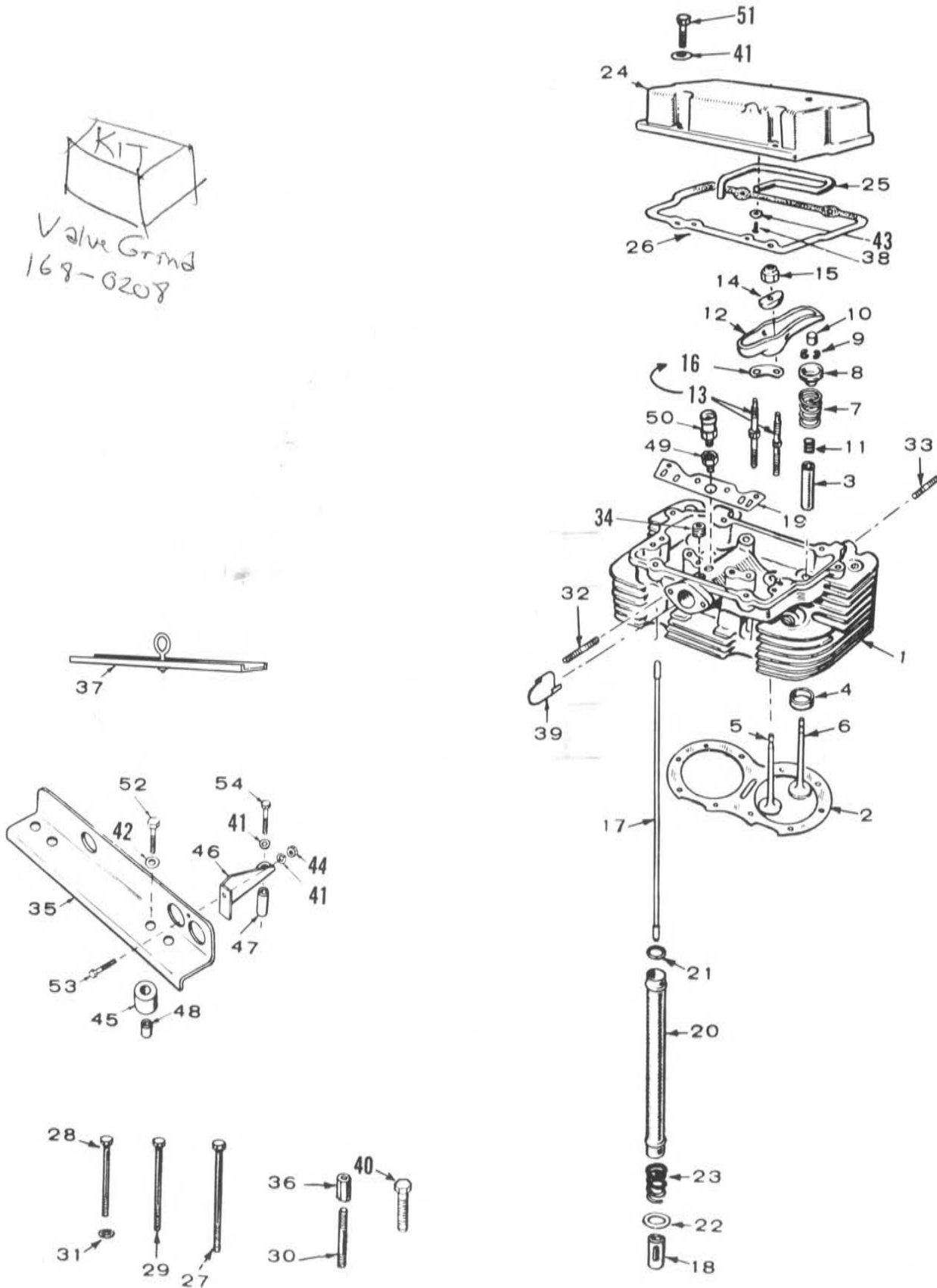
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	104-1362	1	Crankshaft Kit (Includes All Keys)
2	104-0418	1	Gear, Crankshaft
3	104-0416	1	Washer, Retainer
4	518-0188	1	Ring, Lock
5	515-0006	1	Key, Crankshaft to Generator Fan
6	134-1406	1	Flywheel Assembly - Begin Spec H (Replaces Flywheel Assembly Used Spec A-G) Includes Parts Marked *)
7	821-0014	4	Screw, Locking Head (5/16-18 x 1/2")
8	104-0423	1	*△Gear, Ring
9	800-0500	1	Screw, Flywheel Mounting (Special)
10	515-0001	1	Key, Crankshaft to Gear
11	801-0054	4	*#△Screw, Flywheel Hub Mounting (3/8-24 x 2")
12	134-3960	1	Hardware Kit, Hub Mounting - Begin Spec H for Sets Without Vacu-Flo Cooling (Includes Parts Marked #)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
13	526-0185	1	Washer, Flat (15/32" ID x 1-1/2" OD x 3/8" Thk)
14	515-0153	1	Key, Crankshaft to Flywheel
15	854-0017	4	Washer, Lock-IT (5/16")
16	134-1401	1	*Hub, Flywheel - Begin Spec H
17	526-0187	4	*#△Washer, Flat - Hub to Flywheel
18	104-0543	4	*#△Spacer and Washer - Hub to Flywheel
19	870-0352	4	*#△Nut, Locking - Hub to Flywheel (Special)
20	104-0572	1	Flywheel Assembly - Sets With Vacu-Flo Cooling (Includes Parts Marked △)
21	104-0557	1	△Hub, Flywheel - Sets With Vacu-Flo Cooling
22	134-1431	1	Wheel, Blower - Sets With Vacu-Flo Cooling
23	134-0988	1	Plate, Blower Wheel - Sets With Vacu-Flo Cooling
24	850-0055	1	Washer, Lock - Spring (7/16")

* - Parts Included in 134-1406 Flywheel Assembly.
 # - Parts Included in 134-3960 Hardware Kit.
 △ - Parts Included in 104-0572 Flywheel Assembly.

CYLINDER HEAD

KIT
Valve Grind
169-0208



CYLINDER HEAD

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	HEAD, CYLINDER			22	115-0155	16	Washer, Spring Retaining
	110-1313	2	With Valves Gasoline Sets (Includes Parts Marked *)	23	115-0146	8	Spring, Shield Retainer
	110-1388	2	Gas and Gas-Gasoline Sets (Includes Parts Marked Δ)	24	COVER ASSEMBLY, ROCKER		
			Without Valves	115-0134	2	Gasoline Sets (Includes Parts Marked **)	
	110-1439	2	* Gasoline Sets (Includes Parts Marked +)	115-0179	2	Gas and Gas-Gasoline Sets (Includes Parts Marked #)	
	110-1440	2	Δ Gas and Gas-Gasoline Sets (Includes Parts Marked £)	25	LINE, OIL - ROCKER COVER		
2	110-1223	2	Gasket, Head	120-0628	2	**Gasoline Sets	
3	GUIDE, VALVE			120-0626	2	#Gas and Gas-Gasoline Sets	
			Gasoline Sets - Intake and Exhaust	26	115-0130	2	Gasket, Rocker Cover
	110-1501	8	+ Standard	27	110-1225	10	Screw, Cylinder Head (3/8-16 x 4-3/4") Special
	110-1501-01	8	.001" Oversize	28	110-0815	8	Screw, Cylinder Head (3/8-16 x 2") Special
	110-1501-05	8	.005" Oversize	29	110-1282	4	Screw, Cylinder Head (3/8-16 x 4") Special
			Gas and Gas-Gasoline Sets	30	520-0626	2	Stud, Cylinder Head (3/8" x 2-5/8") Spec A through H
			Intake	31	526-0174	12	Washer, Flat (.406 ID x .781 OD X .1345 Thk) Cylinder Head
	110-1501	4	£ Standard	32	520-0338	4	*ΔStud, Intake Manifold
	110-1501-01	4	.001" Oversize	33	520-0608	8	*ΔStud, Exhaust Manifold (Special)
	110-1501-05	4	.005" Oversize	34	505-0274	1	*Δ+£Plug, Pipe - Countersunk Hex Head (1/8")
			Exhaust	35	403-0690	1	Bracket, Lifting - Begin Spec J
	110-1392	4	£ Standard	36	403-0620	2	Nut, Extension - Spec A through H
	110-1392-01	4	.001" Oversize	37			Bar Assembly, Lifting - Spec A through H (For Replacement Order (1) 403-0690, (2) 800-0009 and (2) 850-0060)
	110-1392-05	4	.005" Oversize	38	815-0562	2	**Screw, Machine - Cross Recessed Pan Head (#10 x 5/16")
4	INSERT, VALVE SEAT			39	110-1312	2	*ΔBaffle, Fuel Distributing
			Intake	40	800-0039	2	Screw, Cap - Hex Head (5/16-18 x 3-1/2")
			Gasoline Sets	41	850-0045	10	Washer, Lock - Spring (5/16")
	110-1214	4	+ Standard	42	526-0100	2	Washer, Flat (9/16" ID x 1-3/8" OD x 7/64" Thk) Begin Spec J
	110-1214-02	4	.002" Oversize	43	526-0130	2	**Washer, Flat (17/64" ID x 1" OD x 1/16" Thk)
	110-1214-05	4	.005" Oversize	44	862-0015	1	Nut, Hex (5/16-18) Begin Spec J
	110-1214-10	4	.010" Oversize	45	402-0361	2	Cushion, Vibration - Begin Spec J
	110-1214-25	4	.025" Oversize	46	403-0890	1	Brace, Lifting Bracket - Begin Spec J
			Gas and Gas-Gasoline Sets	47	403-0826	1	Spacer, Lifting Bracket - Begin Spec J
	110-1287	4	£ Standard	48	402-0362	2	Bushing, Spacer - Begin Spec J
	110-1287-02	4	.002" Oversize	49	123-1169	2	Adapter, PCV Valve - Begin Spec T
	110-1287-05	4	.005" Oversize	50	123-1170	2	Valve, PCV - Begin Spec T
	110-1287-10	4	.010" Oversize	51	800-0030	8	Screw, Cap - Hex Head (5/16-18 x 1-1/4")
	110-1287-25	4	.025" Oversize	52	800-0094	2	Screw, Cap - Hex Head (1/2-13 x 2") Begin Spec J
			Exhaust	53	800-0025	1	Screw, Cap - Hex Head (5/16-18 x 5/8") Begin Spec J
	110-1215	4	+£ Standard	54	800-0038	1	Screw, Cap - Hex Head (5/16-18 x 3-1/4") Begin Spec J
	110-1215-02	4	.002" Oversize				
	110-1215-05	4	.005" Oversize				
	110-1215-10	4	.010" Oversize				
	110-1215-25	4	.025" Oversize				
5	VALVE, INTAKE						
	110-1218	4	*Gasoline Sets				
	110-1286	4	ΔGas and Gas-Gasoline Sets				
6	110-1219	4	*ΔValve, Exhaust				
7	110-1221	8	*ΔSpring, Valve				
8	110-1220	8	*ΔRetainer, Valve Spring				
9	110-0858	16	*ΔLock, Valve Spring Retainer				
10	110-0859	8	Cap, Valve Stem				
11	509-0090	4	*ΔSeal, Oil - Intake Valve				
12	ARM, ROCKER						
	115-0128	4	Exhaust				
	115-0129	4	Intake				
13	115-0189	4	*Δ+£Stud Package, Rocker Arm (Package Includes Two Studs and One Lock)				
14	115-0127	8	Ball, Rocker Arm				
15	115-0150	8	Locknut, Rocker Arm				
16	115-0184	4	*Δ+£Lock, Stud				
17	115-0145	8	Rod, Valve Push				
18	TAPPET, VALVE						
	115-0132	8	Spec A through N				
	115-0195	8	Begin Spec P (Included in Cylinder Block Assembly)				
19	115-0196	2	Guide, Push Rod				
20	115-0137	8	Shield, Push Rod				
21	509-0084	16	Seal, Push Rod Shield				

* - Parts Included in 110-1313 Cylinder Head.

Δ - Parts Included in 110-1388 Cylinder Head.

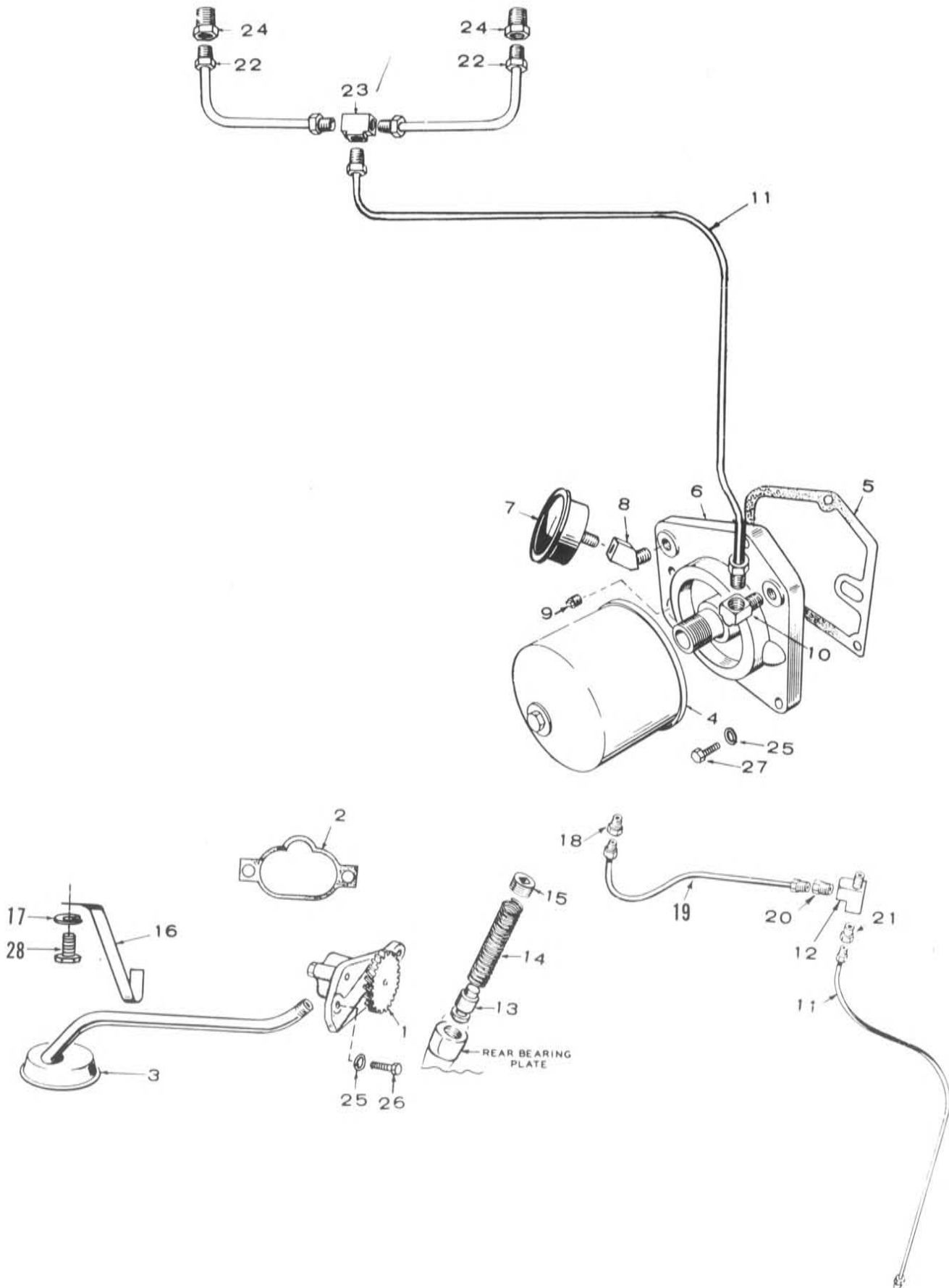
+ - Parts Included in 110-1439 Cylinder Head.

£ - Parts Included in 110-1440 Cylinder Head.

** - Parts Included in 115-0134 Rocker Cover Assembly.

- Parts Included in 115-0179 Rocker Cover Assembly.

OIL SYSTEM



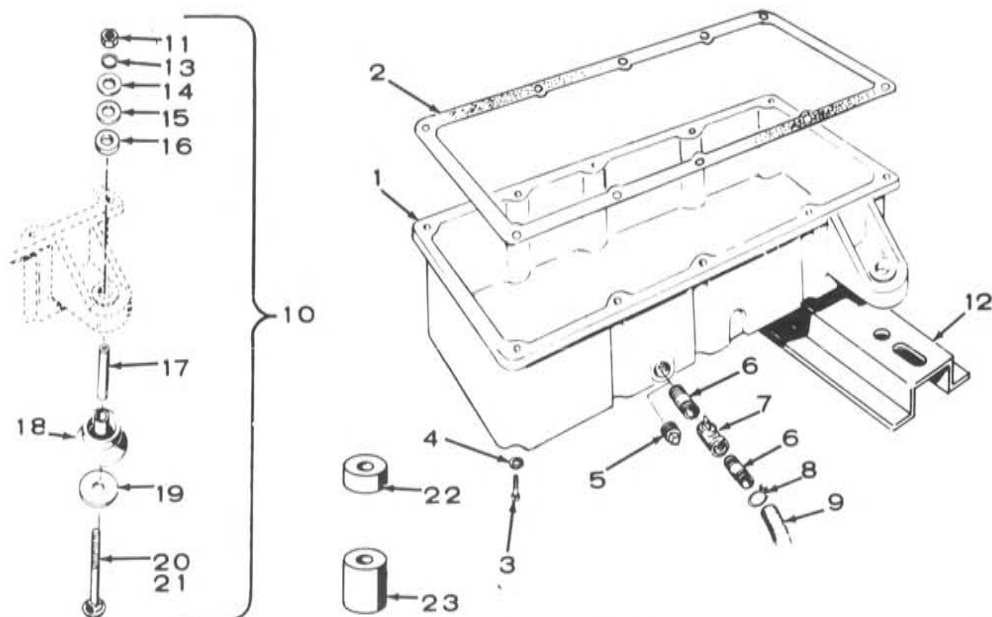
OIL SYSTEM

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	120-0547	1	Pump, Oil
2	120-0580	1	Gasket Kit, Oil Pump
3	CUP, OIL PUMP INTAKE		
	120-0756	1	Spec A through G (This 120-0756 Cup Kit Replaces the Intake Cup With the Straight Tube Used During Spec A through G) Includes Parts Marked *
	120-0601	1	*Begin Spec H (Curved Tube)
4	122-0185	1	Filter, Oil (4-3/8" Long)
5	122-0188	1	Gasket, Adapter
6	122-0182	1	Adapter, Oil Filter
7	193-0006	1	Gauge, Oil Pressure
8	ELBOW, STREET — 45°		
	502-0053	1	Sets Without Low Oil Pressure Switch
	502-0053	2	Sets With Low Oil Pressure Switch
9	505-0057	1	Plug, Pipe (1/8") Sets Without Low Oil Pressure Switch
10	ELBOW, INVERTED MALE — Oil Line to Filter Adapter		
	502-0019	1	Gasoline Sets — Spec A through N
			Gas and Gas-Gasoline Sets
	502-0019	1	Spec A through Serial Number 698177 During Spec N
	502-0037	1	Begin Serial Number 698178 During Spec N
	502-0037	1	Begin Spec P (All Fuels)
11	LINE, FILTER ADAPTER TO CYLINDER HEAD		
			Gasoline Sets
	120-0562	1	Spec A through N
	120-0637	1	Spec P through S
			Gas and Gas-Gasoline Sets
	120-0562	1	Spec A through Serial Number 698177 During Spec N
	120-0606	1	Begin Serial Number 698178 During Spec N through Spec S
	120-0707	1	Begin Spec T (All Fuels)
12	502-0242	1	Tee, Restricted - Front Cylinder Head - Spec A through S
13	120-0539	1	Value, Oil By-Pass
14	120-0555	1	Spring, By-Pass Value
15	505-0274	1	Plug, Pipe - Countersunk (1/8") Oil By-Pass

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
16	120-0602	1	*Bracket, Oil Pump Intake Cup — Begin Spec H
17	850-0045	1	*Washer, Lock - Spring (5/16") Begin Spec H
18	CONNECTOR, INVERTED MALE — Rear Cylinder Head		
			Gasoline Sets
	502-0097	1	Spec A through N
	502-0274	1	Spec P through S (Restricted)
			Gas and Gas-Gasoline Sets
	502-0097	1	Spec A through Serial Number 698177 During Spec N
	502-0274	1	Begin Serial Number 698178 During Spec N through Spec S (Restricted)
19	LINE, TEE TO REAR CYLINDER HEAD		
	120-0575	1	Spec A through N
	120-0635	1	Spec P through S
20	502-0097	1	Connector, Inverted Male - Tee to Rear Cylinder Head Line - Spec A through S
21	CONNECTOR, INVERTED MALE — Adapter Oil Line to Tee		
			Gasoline Sets
	502-0030	1	Spec A through N
	502-0097	1	Spec P through S
			Gas and Gas-Gasoline Sets
	502-0030	1	Spec A through Serial Number 698177 During Spec N
	502-0097	1	Begin Serial Number 698178 During Spec N through Spec S
22	120-0695	2	Line, Oil - Cylinder Head - Begin Spec T
23	502-0373	1	Tee, Inverted Flare - Begin Spec T
24	502-0394	2	Connector, Inverted Male Cylinder Head - Begin Spec T
25	850-0045	5	Washer, Lock - Spring (5/16")
	SCREW, CAP — HEX HEAD		
26	800-0030	2	5/16-18 x 1-1/4"
27	800-0028	3	5/16-18 x 1"
28	800-0025	1	*5/16-18 x 5/8" — Begin Spec H

* - Parts Included in 120-0756 Oil Pump Intake Cup Kit.

OIL BASE

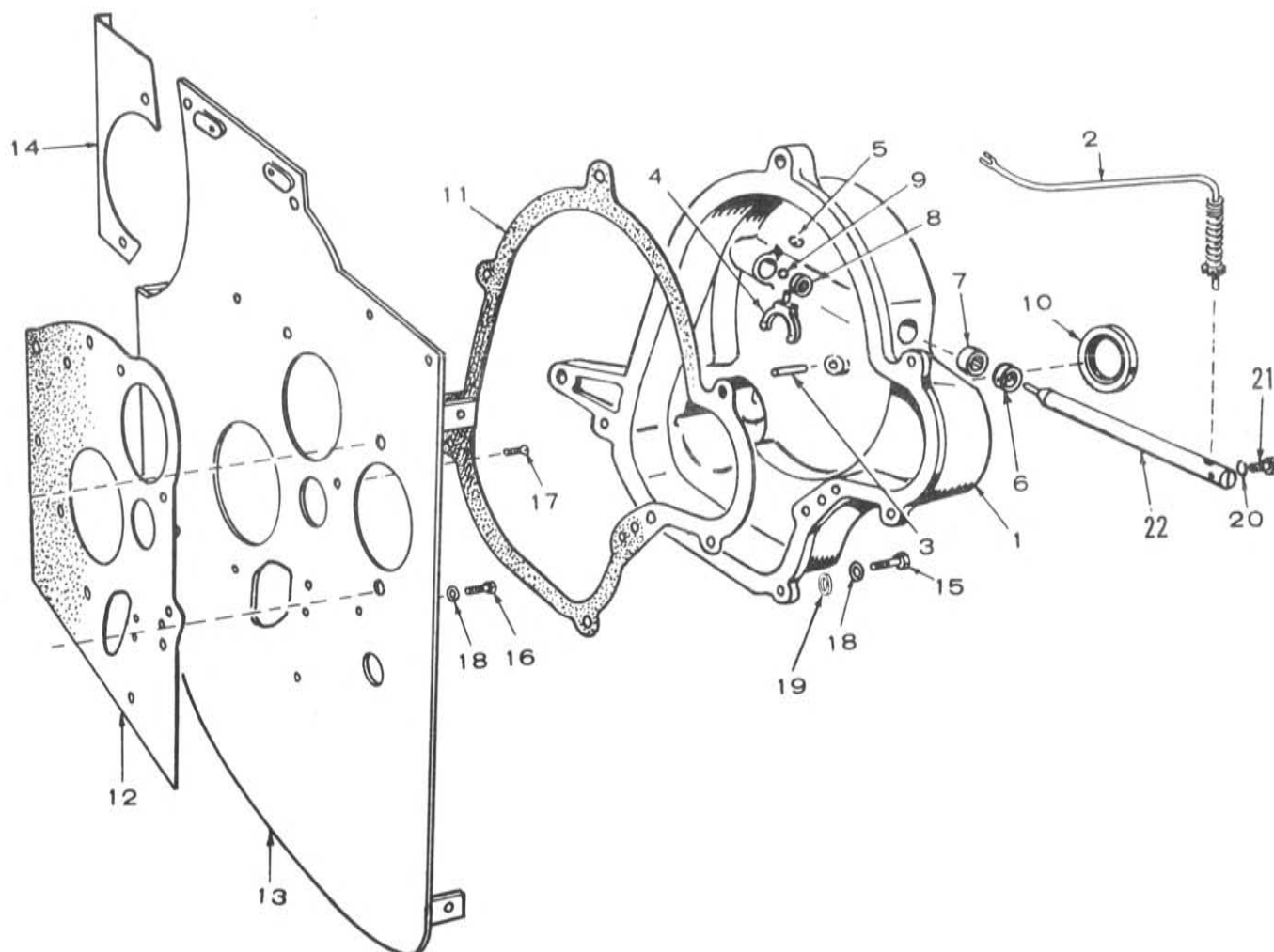


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	BASE, OIL 102-0476	1	Spec A through J Begin Spec K	14	526-0014	4	*#Washer, Flat (29/64" ID x 1-1/2" OD x 1/8" Thk) Use With Cone Shaped Cushions
	102-0539	1	Sets Without Oil Base Heater	15	526-0198	8	*#Washer, Flat (5/8" ID x 1-1/2" OD x 1/16" Thk) Use With Cone Shaped Cushions (Use as Required)
	102-0549	1	Sets With Oil Base Heater (3/8 NPSF)	16	402-0282	4	*#Snubber - Begin Spec K
	102-0622	1	Sets With Oil Base Heater (1/2 NPSF)	17	BUSHING, SPACER 402-0046	4	Spec A through J
2	102-0475	1	Gasket, Oil Base		402-0290	4	*#Begin Spec K
3	800-0072	10	Screw, Cap - Hex Head (7/16-14 x 1-1/4")	18	CUSHION, VIBRATION - Cone Shaped (Begin Spec K) 402-0285	2	Engine End Generator End
4	850-0055	10	Washer, Lock - Spring (7/16")		402-0287	2	Spec K through Z
5	505-0056	1	Plug, Pipe - Square Head (1/2") Sets Without Housing or Skid Mounting		402-0286	2	Begin Spec AA
6	NIPPLE, PIPE 505-0100 505-0002	2 2	Close (1/2") Housed Sets Long (1/2" x 3") Skid Mounted Sets	19	526-0195	4	*#Washer, Flat (29/64" ID x 3-1/4" OD x 1/8" Thk) Use With Cone Shaped Cushions
7	504-0011	1	Valve, Oil Drain - Housed or Skid Mounted Sets	20	816-0212	4	*Bolt, Carriage (7/16-14 x 5-1/2") Sets Without Housing, Skid Mounting or Vacu-Flo Cooling
8	503-0197	1	Clamp, Hose - Housed or Skid Mounted Sets	21	800-0082	4	#Screw, Cap - Hex Head (7/16-14 x 3-3/4") Sets With Housing, Skid Mounting or Vacu-Flo Cooling
9	503-0316	1	Hose, Oil Drain - Housed or Skid Mounted Sets	22	402-0036	4	Mount, Upper Vibration (Cylindrical Shaped) Spec A through J
10	HARDWARE PACKAGE, MOUNTING - Begin Spec K 402-0291	4	Sets Without Housing, Skid Mounting or Vacu-Flo Cooling (Hardware Package for 1 Mount) Includes Parts Marked *	23	MOUNT, LOWER VIBRATION (Cylindrical Shaped) Spec A through J 402-0038 402-0251	2 2	Engine End Generator End
	402-0327	1	Sets With Housing, Skid Mounting or Vacu-Flo Cooling (Hardware Package for 4 Mounts) Includes Parts Marked #				
11	862-0004	4	*#Nut, Hex (7/16")				
12	SUPPORT — Vacu-Flo Cooled Sets Spec A through J 403-0706 403-0648 403-0710	1 1 2	Engine End Generator End Begin Spec K				
13	850-0055	4	*#Washer, Lock - Spring (7/16")				

* - Parts Included in 402-0291 Mounting Hardware Package.

- Parts Included in 402-0327 Mounting Hardware Package.

GEARCASE

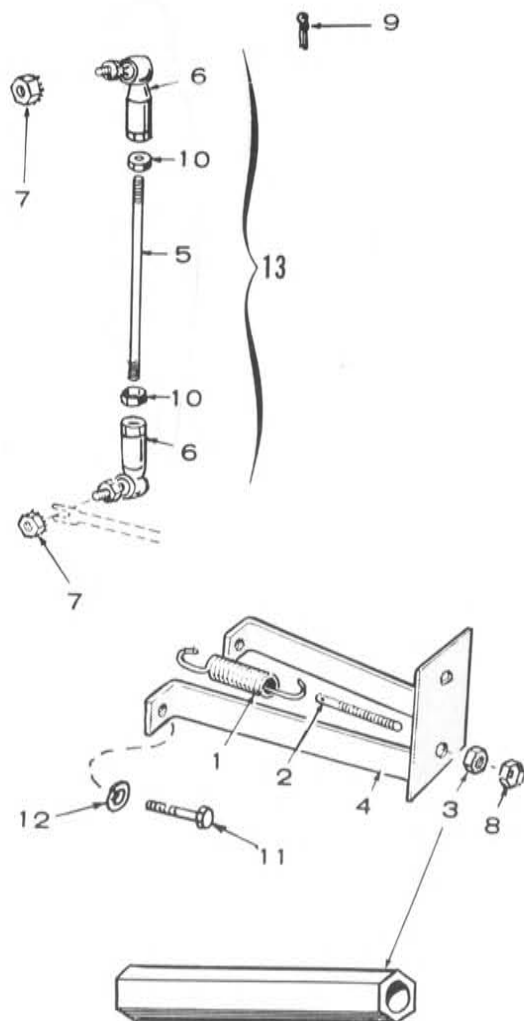


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	GEARCASE ASSEMBLY (Includes Parts Marked*)		
	103-0277	1	Spec A through E (Also Order 103-0251 Gasket)
	103-0277	1	Begin Spec F
2	ARM. GOVERNOR		
	150-0836	1	Spec A through Q
	150-1091	1	Begin Spec R
3	516-0111	1	*Pin, Governor Cup Stop
4	150-0777	1	*Yoke, Governor
5	518-0129	1	*Ring, Yoke Retaining
6	509-0088	1	*Seal, Governor Shaft
7	510-0048	1	*Bearing, Shaft - 1/2" Shaft
8	510-0082	1	*Bearing, Shaft - 1/4" Shaft
9	BALL, GOVERNOR SHAFT THRUST		
	510-0014	1	Spec A through E (3/16")
	510-0043	1	*Begin Spec F (5/16")
10	509-0087	1	*Seal
11	GASKET, GEARCASE		
	103-0219	1	Spec A through E (Cast Iron Cover)
	103-0251	1	Begin Spec F (Die Cast Cover)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
12	103-0218	1	Gasket, Backplate
13	103-0271	1	Backplate, Gearcase (To Replace One-Piece Backplate Used on Early Models Also Order 134-1532 Baffle)
14	134-1532	1	Baffle, Backplate (Not Used on Early Models)
15	SCREW, CAP - HEX HEAD		
	110-0879	4	Special
	800-0028	1	5/16-18 x 1"
16	800-0026	1	Screw, Cap - Hex Head (5/16-18 x 3/4")
17	815-0347	2	Screw, Machine - Flat Head - Socket Drive (1/4-20 x 1/2")
18	850-0045	6	Washer, Lock-Spring (5/16")
19	526-0115	5	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
20	850-0025	1	*Washer, Lock-Spring (#8)
21	815-0176	1	*Screw, Machine - Hex Head (#8-32 x 1/2")
22	150-0838	1	*Shaft, Governor

* - Parts Included in 103-0277 Gearcase Assembly.

GOVERNOR

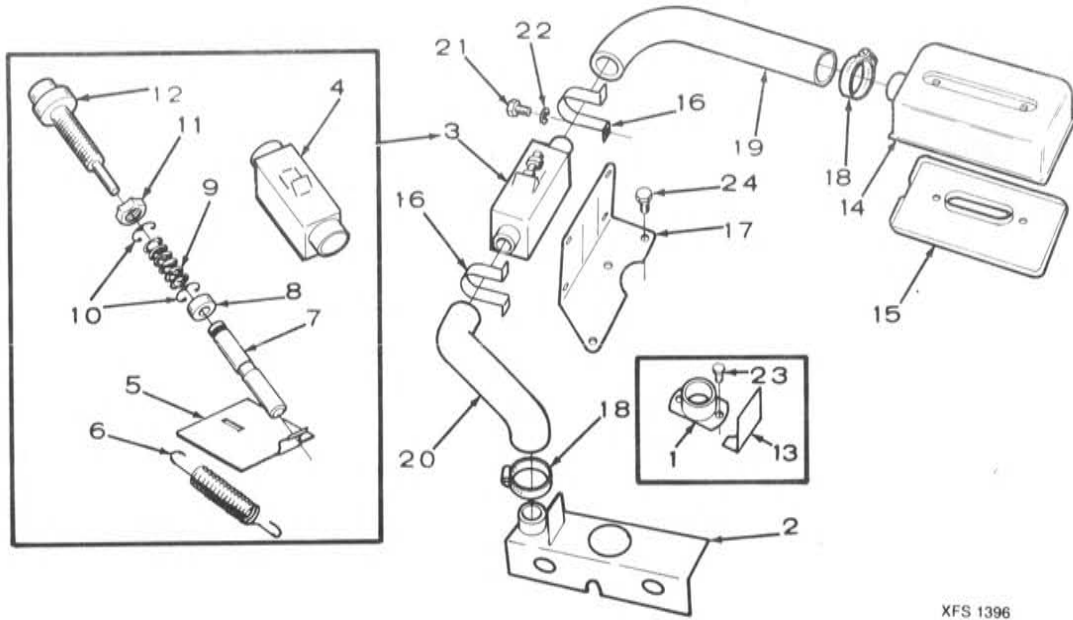


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	SPRING, GOVERNOR		
		1	#Spec A
	150-0861	1	Spec B through Q
	150-0862	1	Spec A through Q
			Vacu-Flo Cooled Sets
	150-1085	1	Begin Spec R
2	STUD, GOVERNOR ADJUSTING		
		1	#Spec A
	150-0863	1	Spec B through Q
			Begin Spec R
	150-1083	1	Pressure Cooled Sets
	150-1082	1	Vacu-Flo Cooled Sets
3	NUT, ADJUSTING		
			Pressure Cooled Sets
	104-0091	1	Spec A through Q
	862-0003	1	Begin Spec R
			Vacu-Flo Cooled Sets
	150-0937	1	Spec A through Q
	150-1112	1	Begin Spec R
4	BRACKET, GOVERNOR		
			Pressure Cooled Sets
	150-0814	1	Spec A through Q
	150-1110	1	Begin Spec R
			Vacu-Flo Cooled Sets
	150-0812	1	Spec A through Q
	150-1107	1	Begin Spec R
5	LINK, GOVERNOR		
	150-0841	1	Spec A through Q
	150-1069	1	*Begin Spec R
6	JOINT, BALL		
	150-0974	1	Spec A through Q
	150-1081	2	*Begin Spec R
7	870-0131	2	Nut, Hex - ET (#10-32)
8	NUT, LOCK - Sets Without Vacu-Flo Cooling		
	870-0130	1	Spec A through Q (3/8-24)
	870-0133	1	Begin Spec R (3/8-16)
9	516-0036	1	Key, Cotter — Spec A through Q
10	870-0053	2	*Nut, Hex - Begin Spec R (#10-32)
11	800-0005	2	Screw, Cap - Hex Head (1/4-20 x 3/4")
12	850-0040	2	Washer, Lock - Spring (1/4")
13	150-1070	1	Linkage Assembly, Governor - Begin Spec R (Includes Parts Marked *)

- For Spec A Replacement Order 1 each of 150-0861 Governor Spring and 150-0863 Governor Adjusting Stud.

* - Parts Included in 150-1070 Governor Linkage Assembly.

CARBURETOR AIR HEATER-BEGIN SPEC P (GASOLINE SETS)



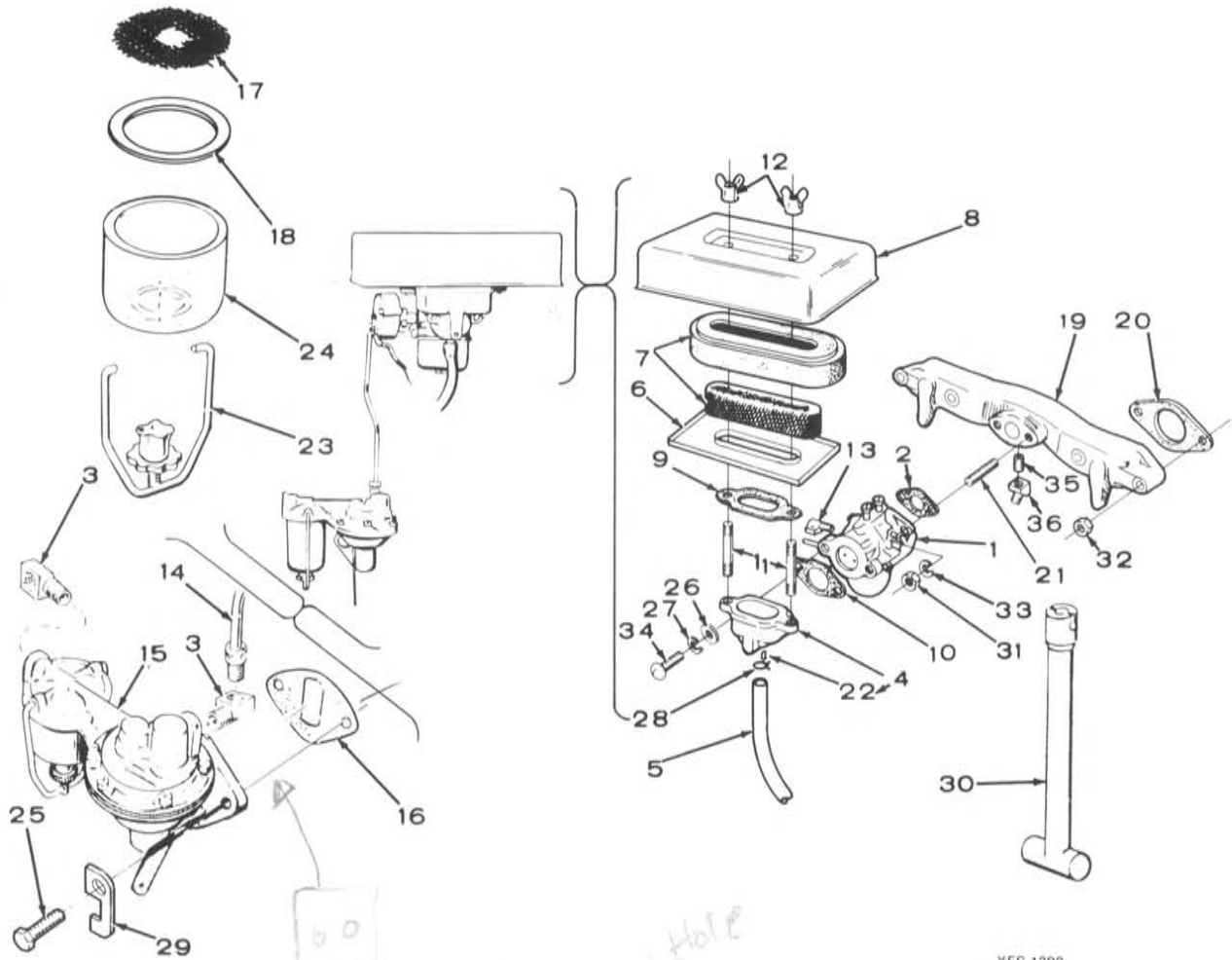
XFS 1396

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
HEATER KIT, CARBURETOR AIR (Complete Replacement for All Specs)			
			Pressure Cooled Sets
	140-0894	1	Without Duct or Duct and Shutters
	140-0893	1	With Duct or Duct and Shutters
	140-0892	1	Vacu-Flo Cooled Sets
1	133-0187	1	Adapter, Hose - Air Outlet - Pressure Cooled Sets with Duct or Duct & Shutter and Vacu-Flo Cooled Sets
2	133-0192	1	Plenum, Manifold Heater - Pressure Cooled Sets without Duct or Shutters
3	140-0788	1	Control Assembly, Temperature (Includes Parts Marked*)
4	140-0785	1	*Housing, Temperature Control
5	140-0782	1	*Shutter, Temperature Control
6	140-0786	1	*Spring, Shutter Control
7	140-0784	1	*Plunger, Temperature Control
8	140-0808	1	*Spacer, Vernatherm
9	140-0787	1	*Spring, Vernatherm
10	518-0205	2	*Ring, Retaining
11	870-0195	1	*Nut, Locking - Vernatherm (5/16-24)
12	309-0181	1	*Vernatherm, Temperature Control

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
13	140-0789	1	Shield, Air Outlet Hose - Pressure Cooled Sets with Duct or Duct & Shutter
14	140-0790	1	Cover, Air Cleaner
15	140-0791	1	Pan, Air Cleaner
16	140-0821	2	Clamp, Temperature Control Support - Pressure Cooled Sets
17	140-0822	1	Support, Temperature Control - Pressure Cooled Sets
18	CLAMP, HOSE		
	503-0311	2	Pressure Cooled Sets
	503-0311	4	Vacu-Flo Cooled Sets
19	HOSE, CONTROL TO AIR CLEANER		
	503-0475	1	Pressure Cooled Sets
	503-0477	1	Vacu-Flo Cooled Sets
20	HOSE, PLENUM TO CONTROL		
	503-0476	1	Pressure Cooled Sets
	503-0039	1	Vacu-Flo Cooled Sets
21	813-0105	2	Screw, Machine - Round Head (10-32 x 1")
22	854-0010	2	Washer, Lock - IT (#10)
23	808-0032	2	Screw, Machine - Round Head Sheet Metal (#10 x 1/2")
24	800-1005	2	Screw, Cap - Hex Head (1/4-20 x 3/4")

* - Parts Included in 140-0788 Temperature Control Assembly.

FUEL SYSTEM (GASOLINE)



XFS 1392

149-0638
Cover - Fuel Pump Hole

FUEL SYSTEM (GASOLINE)

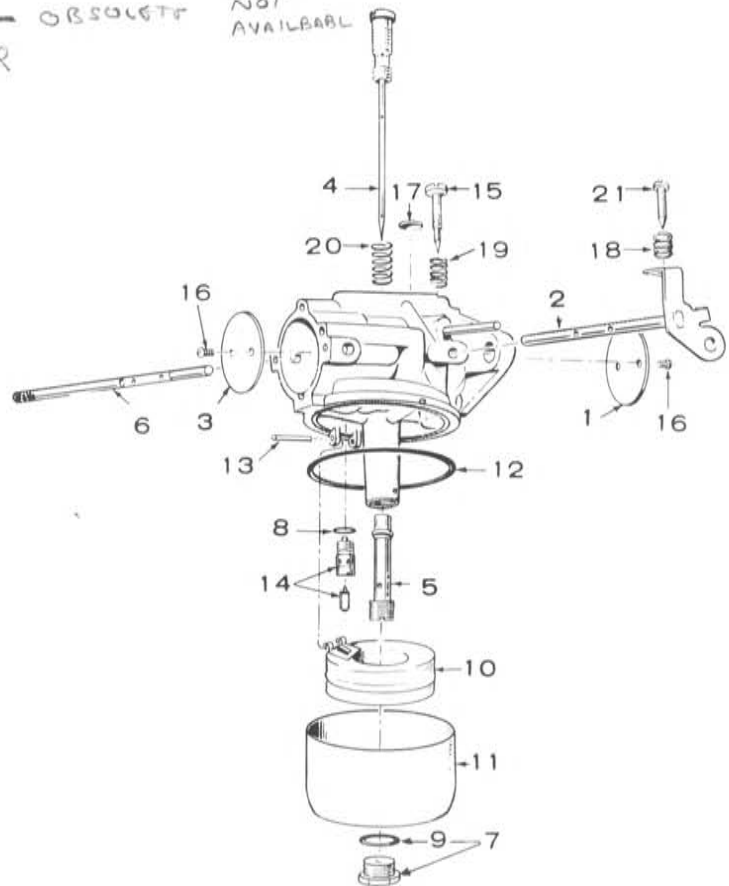
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	CARBURETOR - Includes Mounting Gasket (See Separate Group for Components)		
	141-0759	1	Spec A through Q (Spec A through K Also order 153-0430 Thermo-Magnetic Choke Kit When Originally Equipped With Electric Choke)
	141-0876	1	Begin Spec R
2	141-0281	1	Gasket, Carburetor
3	502-0002	2	Elbow, Inverted Male (90°) Fuel Pump Inlet and Outlet
4	ADAPTER, AIR CLEANER (Includes Tube)		
	140-0647	1	Spec A through Q
	140-0933	1	Begin Spec R
5	HOSE, BREATHER		
	503-0389	1	Spec A through H
	503-0416	1	Spec J through S
	503-0471	1	Begin Spec T
6	PAN, AIR CLEANER		
	140-0595	1	Spec A through N
	140-0791	1	Begin Spec P
	140-0595	1	Gas and Gas-Gasoline Sets
7	140-1907	1	Element and Retainer
8	COVER, AIR CLEANER		
	140-0594	1	Spec A through N
	140-0790	1	Begin Spec P
	140-0594	1	Gas and Gas-Gasoline Sets
9	140-0584	1	Gasket, Air Cleaner
10	GASKET, ADAPTER TO CARBURETOR		
	140-0585	1	Spec A through Q
	140-0921	1	Begin Spec R
11	520-0621	2	Stud, Air Cleaner (1/4" x 3")
12	865-0020	2	Nut, Wing (1/4-20)
13	ELBOW, INVERTED MALE (Carburetor Inlet)		
	502-0002	1	Spec A through K (90°)
	502-0065	1	Begin Spec L (45°)
14	LINE, PUMP TO CARBURETOR		
	159-0744	1	Spec A through K
	149-1016	1	Spec L through Q
	149-1099	1	Begin Spec R

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
15	149-1787	1	Pump Kit, Fuel - Includes Mounting Gasket
	149-1048	1	Repair Kit, Fuel Pump
16	149-0792	1	Gasket, Fuel Pump
17	149-0463	1	Screen, Fuel Pump
18	149-0517	1	Gasket, Bowl
19	MANIFOLD, INTAKE		
	154-0724	1	Spec A
			Begin Spec B
	154-0749	1	Gasoline Sets
			Gas and Gas-Gasoline Sets
	154-0749	1	Sets Without Vacuum Switch
	154-1224	1	Sets With Vacuum Switch
20	154-0733	2	Gasket, Intake Manifold
21	520-0526	2	Stud, Carburetor Mounting (5/16" x 1-1/4")
22	123-0732	1	Tube, Nylon
23	BAIL, FUEL PUMP (Measure for Correct Length)		
	149-1006	1	3-5/8" Long
	149-1169	1	2-7/8" Long
24	BOWL, FUEL PUMP (Measure for Correct Length)		
	149-0116	1	2-3/8" Long
	149-1168	1	1-5/8" Long
25	800-0027	2	Screw, Cap - Hex Head (5/16-18 x 7/8")
26	526-0241	2	Washer, Flat (#10)
27	850-0030	2	Washer, Lock - Spring (#10)
28	503-0171	2	Clamp, Breather Hose
29	149-1307	2	Stiffener, Fuel Pump Mounting
30	141-0727	1	Rod, Carburetor Adjusting
31	868-0002	2	Nut, Jam - Hex Head (5/16-24)
32	870-0137	4	Nut, Hex - Self-Locking (5/16-24)
33	854-0017	2	Washer, Lock - IT (5/16")
34	813-0108	2	Screw, Machine - Round Head (#10-32 x 1-1/2")
35	505-0098	1	Nipple, Close - Pipe (1/8" x 3/4") Gas and Gas-Gasoline Sets With Vacuum Switch
36	502-0053	1	Elbow, Street - Brass (45°) Gas and Gas-Gasoline Sets With Vacuum Switch

CARBURETOR PARTS — SPEC A THROUGH Q

(Note Replacement Carburetor are same as
used on units beginning with spec R)

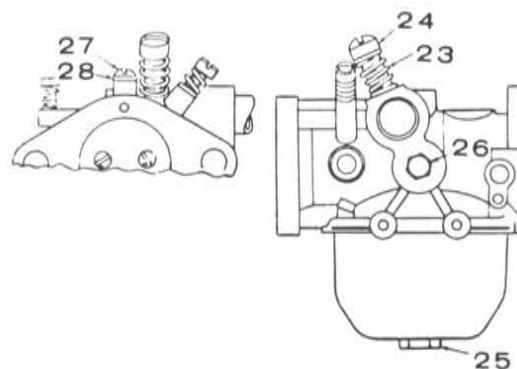
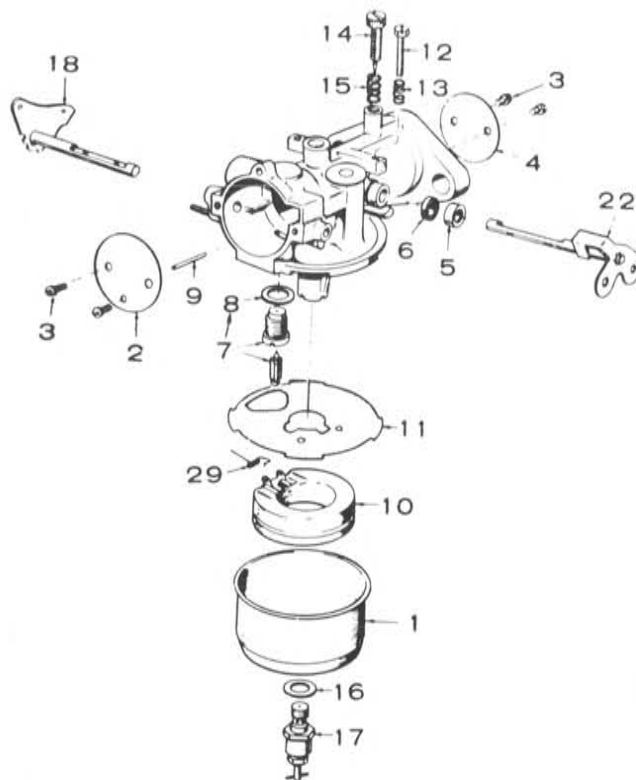
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
CARBURETOR REPLACEMENT KITS			
		1	Gasoline Sets - Kit 141-0759 (Includes carburetor 141-0876)
		1	Gas-Gasoline Sets - Kit 141-0758 (Includes carburetor 141-0886)
		1	Gas Sets - Kit 141-0757 (Includes carburetor 141-0889)
143-0241		1	Repair Kit (Includes Parts Marked *)
143-0201		1	*Gasket Kit (Includes Parts Marked #)
141-0281		1	*#Gasket, Carburetor Mounting
1 143-0202		1	Valve, Throttle
2	SHAFT AND LEVER, THROTTLE		
	145-0301	1	Spec A
	143-0234	1	Begin Spec B
3	143-0204	1	Valve, Choke
4	143-0235	1	*Needle, Idle Jet and High Speed Adjusting
5	143-0237	1	*Nozzle (Not Used on Gas Only Carburetor)
6	SHAFT, CHOKE		
	143-0207	1	Gasoline Carburetor Spec A through K
	143-0315	1	Spec L through Q
	143-0232	1	Gas-Gasoline Carburetor Spec A through K
	143-0316	1	Spec L through Q
7	143-0208	1	Screw and Gasket, Bowl
8	143-0015	1	#Gasket, Fuel Inlet Valve
9	143-0209	1	#Gasket
10	143-0105	1	Float and Lever ((Not Used on Gas Only Carburetor)
11	143-0210	1	Bowl
12	143-0077	1	#Gasket, Bowl Ring
13	141-0703	1	*Pin, Float (Not Used on Gas Only Carburetor)
14	143-0341	1	*Valve, Fuel Inlet
15	143-0213	1	Screw, Idle Adjusting (2 for Gas-Gasoline Carburetor)
16	812-0014	4	*Screw, Machine - Round Head (#3-48 x 3/16")
17	143-0110	1	Plug, Expansion
18	143-0214	1	Spring, Throttle Adjusting
19	143-0112	1	Spring, Idle Adjusting (2 for Gas-Gasoline Carburetor)
20	143-0114	1	Spring, High Speed Adjusting
21	143-0215	1	Screw, Throttle Adjusting
24	145-0308	1	Tube, Gas Inlet - Gas and Gas-Gasoline Sets
25	145-0309	1	Needle, Gas Adjusting - Gas and Gas-Gasoline Sets
26	148-0010	1	Spring, Gas Adjusting - Gas and Gas-Gasoline Sets
27	143-0231	1	Wire, Choke Lock - Gas-Gasoline Sets
28	505-0008	1	Plug (1/8") - Gas Sets
29	510-0075	1	Bearing, Needle - Throttle Shaft - Spec A
30	510-0076	1	Bearing, Needle - Throttle Shaft - Spec A



* - Parts Included in 143-0241 Repair Kit.
- Parts Included in 143-0201 Gasket Kit.

CARBURETOR PARTS — BEGIN SPEC R

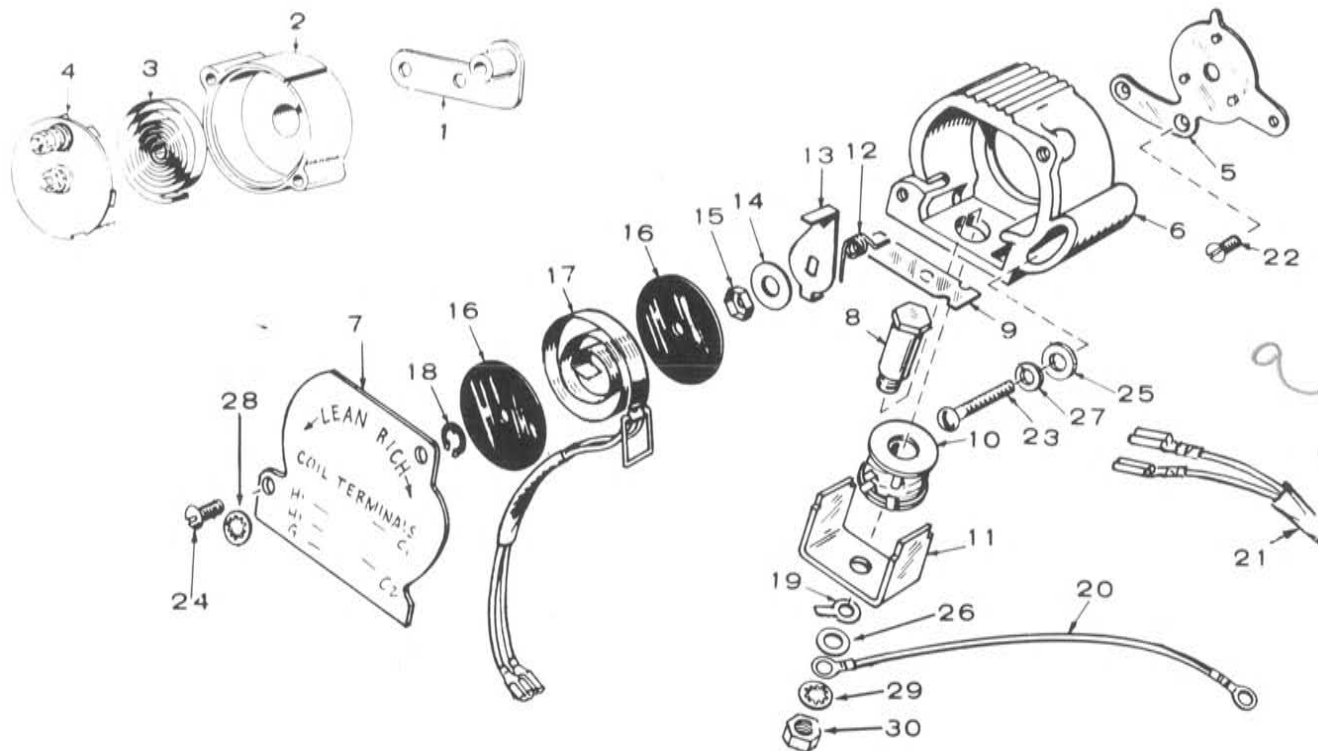
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	CARBURETOR (Includes Mounting Gasket)		
	141-0876	1	Gasoline Sets —
	141-0886	1	Gas-Gasoline Sets
	141-0889	1	Gas Sets
	141-0747	1	Repair Package (Includes Parts Marked *)
	141-0748	1	Gasket Kit (Includes Parts Marked #)
	141-0281	1	*#Gasket, Carburetor Mounting
1	141-0708	1	Bowl, Fuel
2	141-0860	1	Plate, Choke (Not Used on Gas Only Carburetor)
3	141-0698	4	Screw and Washer, Choke and Throttle Plate Mounting (Two Used on Gas Only Carburetor)
4	141-0793	1	Plate, Throttle
5	141-0705	1	*Retainer, Seal
6	141-0661	1	*#Seal, Rubber
7	141-0830	1	*Valve Seat Assembly, Fuel (Not Used on Gas Only Carburetor)
8	141-0811	1	*#Washer, Fuel Valve Seat (Not Used on Gas Only Carburetor)
9	141-0703	1	*Shaft, Float (Not Used on Gas Only Carburetor)
10	141-0702	1	Float Assembly (Not Used on Gas Only Carburetor)
11	141-0701	1	*#Gasket, Bowl to Body
12	141-0700	1	Screw, Throttle Stop
13	141-0711	1	Spring, Throttle Stop
14	NEEDLE, IDLE ADJUSTING		
	141-0713	1	Gasoline and Gas Only Carburetor
	141-0713	2	Gas-Gasoline Carburetor
15	SPRING, IDLE NEEDLE		
	141-0710	1	Gasoline and Gas Only Carburetor
	141-0710	2	Gas-Gasoline Carburetor
16	141-0077	1	*#Washer, Main Jet Assembly
17	141-0712	1	Jet Assembly, Main (Adjustable) Not Used on Gas Only Carburetor
18	141-0679	1	Shaft, Choke (Not Used on Gas Only Carburetor)
22	141-0735	1	Shaft and Lever, Throttle
23	141-0733	1	Spring, Main Gas Needle - Gas and Gas-Gasoline Carburetor
24	141-0734	1	Needle, Main Gas Adjusting - Gas and Gas-Gasoline Carburetor
25	141-0736	1	Nut, Bowl - Gas Only Carburetor
26	141-0737	1	Plug, Pipe (1/8") Gas Only Carburetor
27	141-0738	1	Screw - Gas Only Carburetor
28	141-0739	1	Washer - Gas Only Carburetor
29	141-0799	1	*Spring, Float



* - Parts Included in 141-0747 Repair Package.

- Parts Included in 141-0748 Gasket Kit.

Electric CHOKE

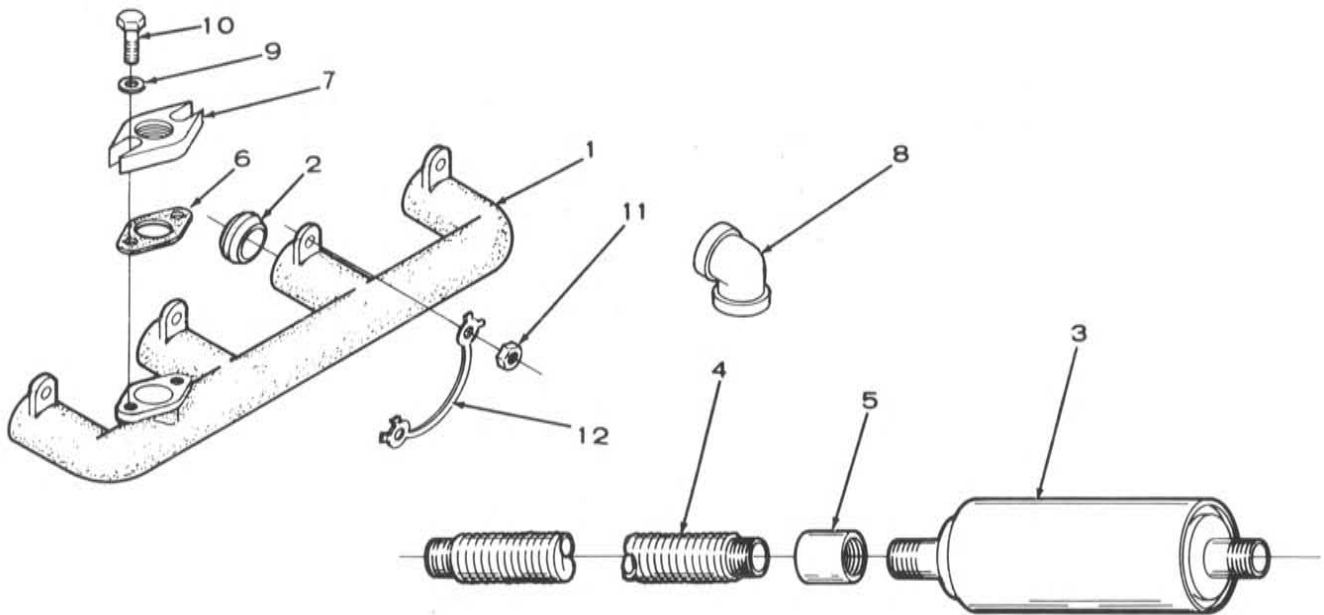


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	153-0430	1	Choke Kit - Replacement for Sets Originally Equipped With Thermo-Magnetic Choke
1		1	*Adapter - Spec A through K
2	153-0324	1	Bracket - Spec A through K
3		1	*Element - Spec A through K
4	153-0325	1	Cover Assembly, Choke - Spec A through K
5	153-0385	1	Plate, Mounting - Begin Spec L
6	153-0386	1	Body - Begin Spec L
7	153-0389	1	Cover - Begin Spec L
8	153-0391	1	Core, Solenoid - Begin Spec L
9	153-0395	1	Armature - Begin Spec L
10	307-1203	1	Coil, Solenoid Assembly - Begin Spec L
11	153-0392	1	Frame, Solenoid - Begin Spec L
12	SPRING		
	153-0387	1	Spec L through R
	153-0425	1	Begin Spec S
13	153-0390	1	Lever, Thermostat - Begin Spec L
14	526-0018	1	Washer, Flat (17/64 ID x 5/8 OD x 1/16" Thk) - Begin Spec L
15	870-0134	1	Palnut (1/4-20) - Begin Spec L
16	153-0399	2	Insulator - Begin Spec L

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
17	HEATER ASSEMBLY		
	153-0400	1	Spec L through R
	153-0422	1	Begin Spec S
18	518-0129	1	Ring, Retaining - Begin Spec L
19	332-0876	1	Terminal Ground - Begin Spec L
20	LEAD		
	334-0028	1	Choke to Coil - Spec A through K
	334-0028	1	Choke Solenoid to Ground - Begin Spec L
21	338-0332	1	Harness, Choke - Begin Spec L
22	SCREW, FLATHEAD - CHOKE PLATE MOUNTING		
	815-0161	2	Late Models (#10-32 x 3/8")
	815-0266	2	Early Models (#8-32 x 3/8")
23	813-0107	1	Screw, Round Head (#10-32 x 1-1/4")
24	812-0076	2	Screw, Round Head (#8-32 x 5/16")
25	526-0008	1	Washer, Flat (13/64" ID x 7/16 OD x 1/32" Thk)
26	526-0022	1	Washer, Flat (21/64" ID x 9/16 OD x 1/16 Thk)
27	850-0030	1	Washer, Lock - Spring (#10)
28	854-0007	2	Washer, Lock - IT (#8)
29	854-0017	1	Washer, Lock - IT (5/16")
30	862-0015	1	Nut, Hex (5/16-18)

* - Parts Not Available - Order Replacement Choke Kit 153-0430.

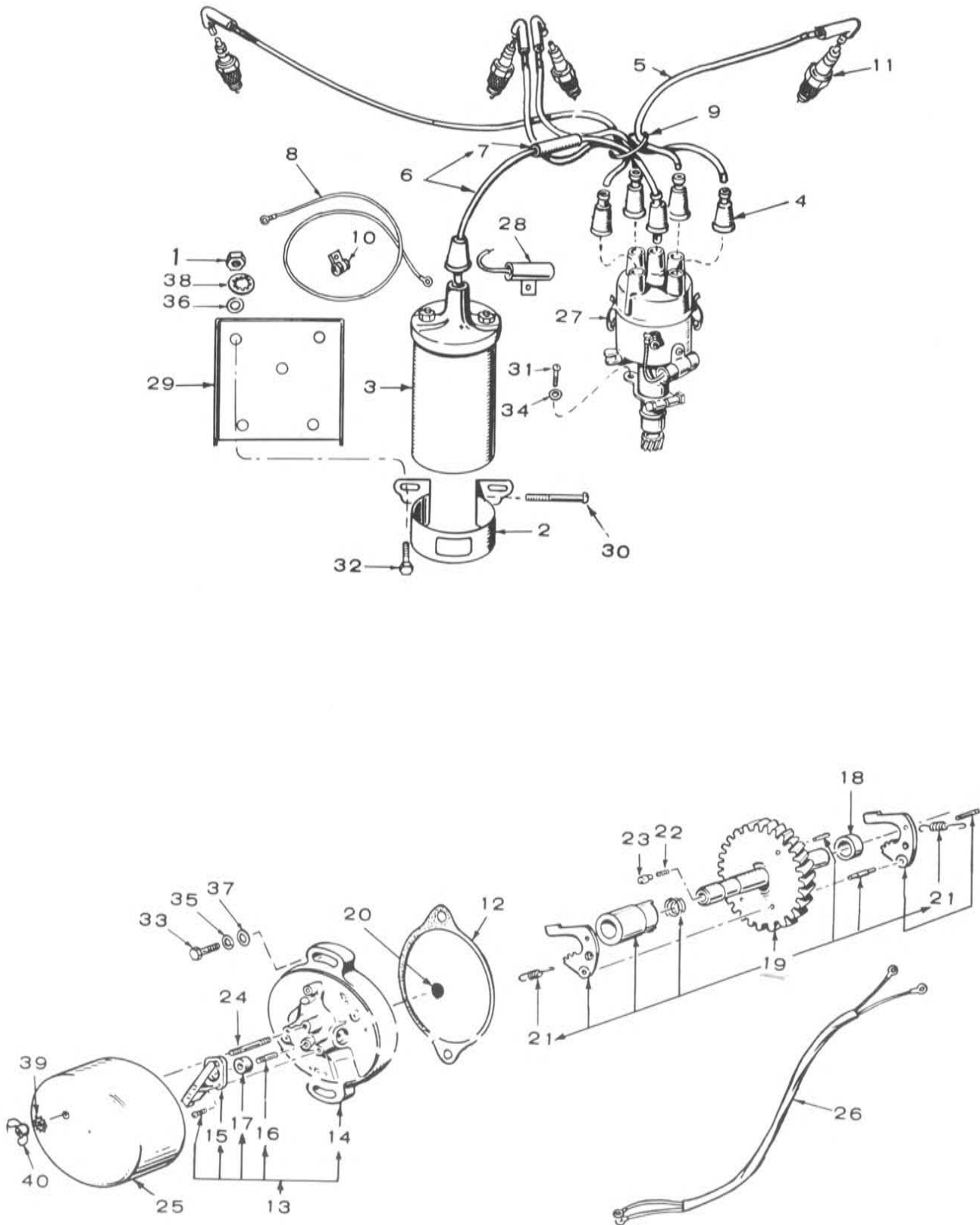
EXHAUST SYSTEM



EXS 1066

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	154-0714	1	Manifold, Exhaust	5	505-0032	1	Coupling, Pipe (1-1/2")
2	154-0463	4	Gasket - Exhaust Manifold				Unhoused and Skid Mounted Sets
3	MUFFLER			6	154-0738	1	Gasket, Exhaust Outlet
	155-0077	1	Unhoused and Skid Mounted Sets	7	155-0782	1	Flange, Exhaust Outlet
	155-0456	1	Housed Sets	8	505-0043	2	Elbow, Pipe (1-1/2 x 90°)
4	TUBE, EXHAUST - FLEXIBLE						Housed Sets
	155-0493	1	Unhoused and Skid Mounted Sets (36")	9	526-0174	2	Washer, Flat (13/32" ID x 25/32" OD x 9/64" Thk)
	155-0841	1	Housed Sets (9-3/4")	10	800-0052	2	Screw, Cap - Hex Head (3/8-16 x 1-1/2")
	155-0949	1	Housed Sets With 155-0360 Critical Muffler (10-5/8")	11	110-0445	8	Nut, Hex (Special)
				12	154-1665	4	Tab, Lock

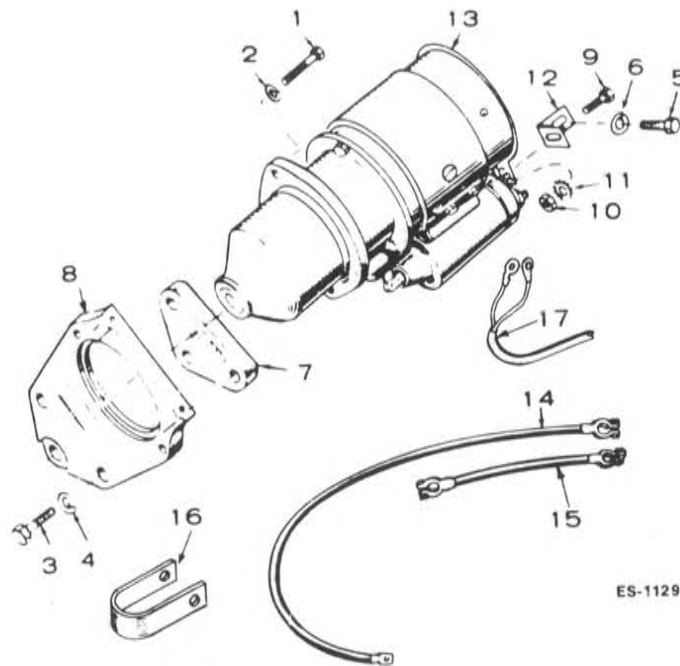
IGNITION SYSTEM



IGNITION SYSTEM

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	862-0001	2	Nut, Hex (1/4-20)	21	160-0711	2	Spring, Timing Weight
2	166-0279	1	Clamp, Coil	22	160-0773	1	Spring, Thrust Plunger
3	166-0278	1	Coil, Ignition	23	160-0774	1	Plunger, Thrust
4	160-0558	6	Nipple, Ignition Cable	24	520-0347	1	Stud, Plate Cover
5	CABLE KIT, SPARK PLUG — Includes Suppressor			25	160-0719	1	Cover, Breaker Plate
	167-1596	3	13"	26	338-0261	1	Harness, Wiring - Switchplate to Control
	167-1595	1	24"				
6	CABLE, COIL TO DISTRIBUTOR (Includes Suppressor)			27	DISTRIBUTOR - See Separate Group for Components		
	167-1426	1	Pressure Cooled Sets		166-0307	1	Sets Without Vacu-Flo Cooling
	167-1425	1	Vacu-Flo Cooled Sets		160-1300	1	Sets With Vacu-Flo Cooling
7	314-0006	1	Suppressor, Ignition Coil - Begin Spec G (Also Usable on Spec A through F)	28	312-0193	1	Condenser, Ignition Coil - Begin Spec G (Also Usable on Spec A through F)
8	334-0028	1	Lead, Coil to Distributor	29	160-0886	1	Bracket, Coil Mounting - Vacu-Flo Cooled Sets
9	509-0096	1	"O" Ring	30	166-0286	1	Screw, Round Head Machine - Coil Clamp
10	332-0052	1	Clip, Spark Plug Cables	31	812-0148	1	Screw, Round Head Machine (1/4-20 x 1/2")
11	PLUG, SPARK			32	800-0002	2	Screw, Hex Head Cap (1/4-20 x 3/8")
	167-0241	4	Non-Resistor Type	33	800-0052	2	Screw, Hex Head Cap (3/8-16 x 1-1/2")
	167-0237	4	Resistor Type	34	850-0040	1	Washer, Lock (1/4")
12	160-0721	1	Gasket, Breaker Plate	35	850-0050	2	Washer, Lock (3/8")
13	191-0395	1	Plate Assembly, Start-Disconnect	36	526-0015	2	Washer, Flat (9/32 ID x 9/16 OD x 1/16" Thk)
14	160-1224	1	Plate Only, Start-Disconnect	37	526-0026	2	Washer, Flat (13/32 ID x 3/4 OD x 1/16" Thk)
15	309-0134	1	Switch Assembly, Start-Disconnect	38	854-0014	2	Washer, Lock - IT (1/4")
16	309-0140	1	Plunger, Start-Disconnect	39	853-0008	1	Washer, Lock - ET (#10)
17	160-0382	1	Diaphragm, Start-Disconnect	40	865-0011	1	Nut, Wing (#10-32)
18	160-0720	1	Spacer, Timing Control				
19	160-0707	1	Gear and Shaft Assembly				
20	160-0806	1	Disc, Thrust				

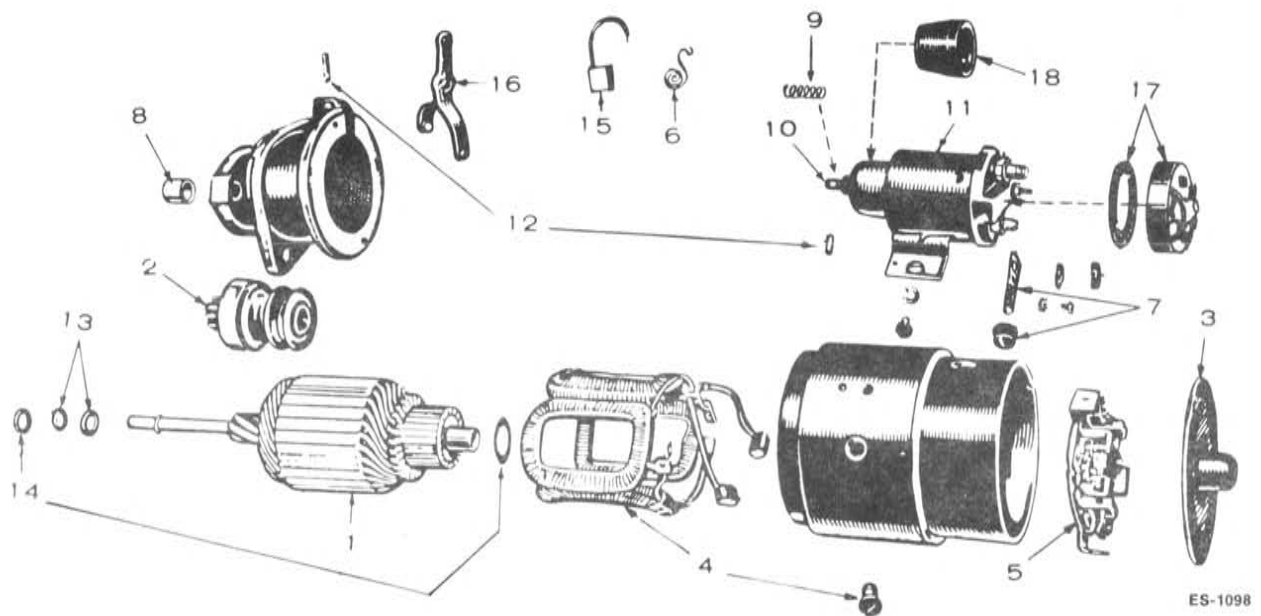
STARTER



ES-1129

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0051	2	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
2	850-0050	2	Washer, Lock - Spring (3/8")
3	800-0054	2	Screw Cap - Hex Head (3/8-16 x 2")
4	850-0050	3	Washer, Lock - Spring (3/8")
5	800-0052	1	Screw, Cap - Hex Head (3/8-16 x 1-1/2")
6	850-0050	1	Washer, Lock - Spring (3/8")
7	191-0311	1	Spacer, Starter
8	191-0512	1	Flange, Starter
9	800-0046	1	Screw, Cap - Hex Head (3/8-16 x 1/2")
10	864-0003	1	Nut, Hex (3/8-16)
11	856-0010	1	Washer, Lock - EIT (3/8")
12	191-0365	1	Bracket, Starter
13	191-0324	1	Starter (See Separate Group for Components)
14	CABLE, BATTERY 416-0021	2	Sets Without Housing or Skid Mounting (20-1/2")
	416-0037	2	Sets With Housing or Skid Mounting (48")
15	416-0133	1	Cable, Battery Jumper
16	416-0096	1	Clamp, Battery Cable
17	338-0262	1	Harness, Wiring

STARTER PARTS

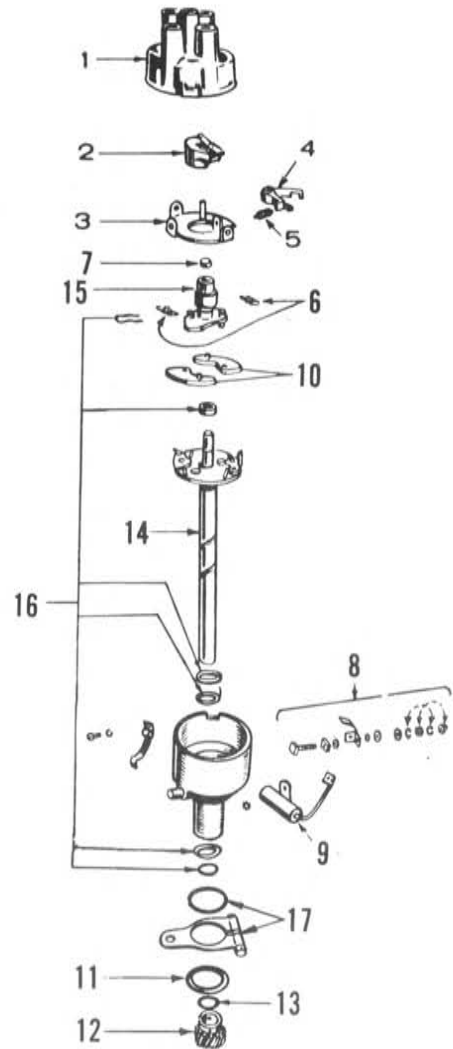


ES-1098

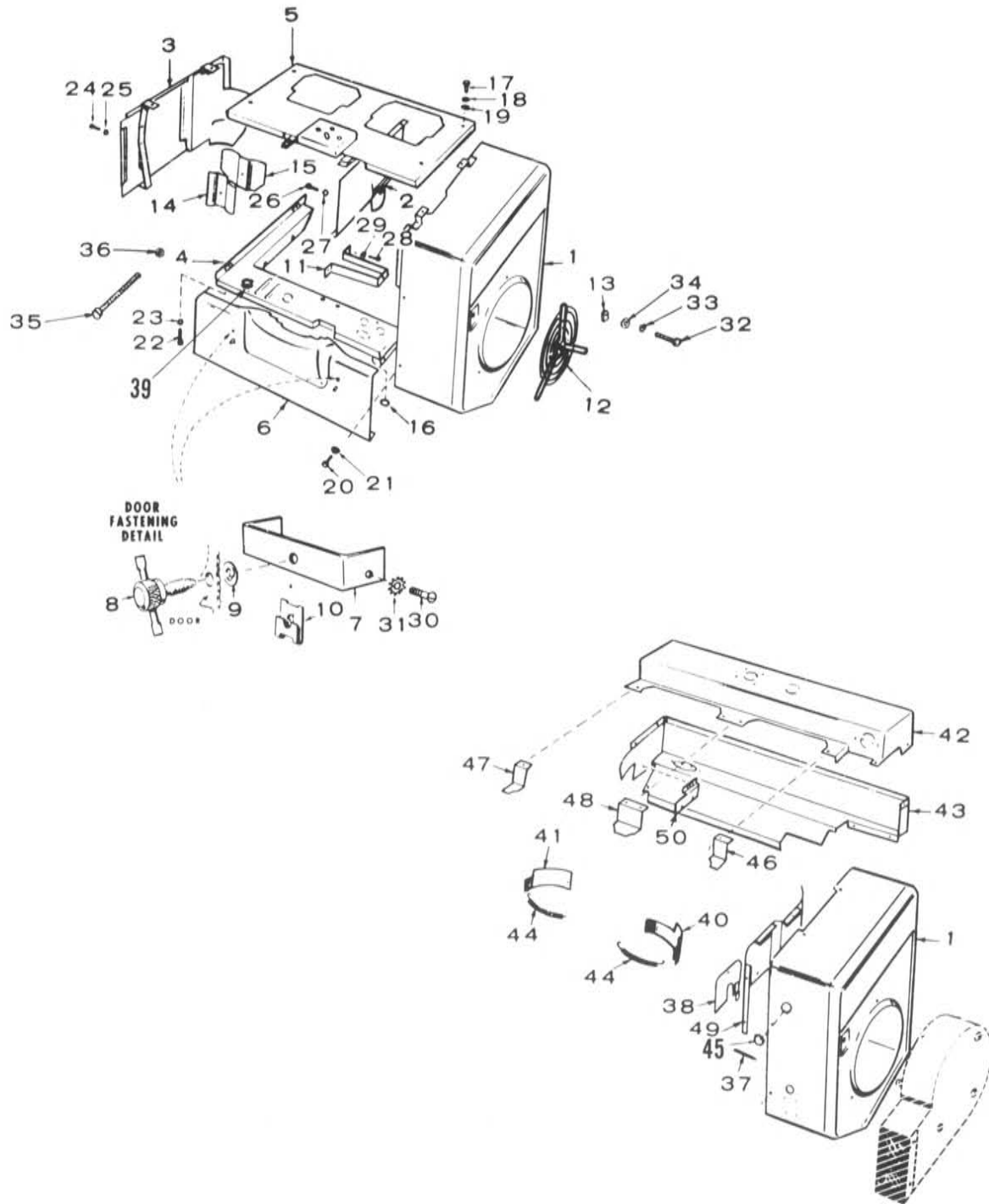
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	191-0324	1	Starter
1	191-0712	1	Armature
2	191-0432	1	Clutch
3	191-1023	1	Head Assembly, Commutator End
4	191-1024	1	Coil Package, Field
5	191-1025	1	Plate Assembly, Brush
6	191-1020	1	Spring Set, Brush (Set of 4)
7	191-1263	1	Connector Package
8	191-0497	1	Bearing (Bronze), Drive End
9	191-1027	1	Spring, Plunger
10	191-1028	1	Core Assembly, Moving
11	191-0433	1	Switch, Solenoid
12	191-1029	1	Yoke Parts Package
13	191-1030	1	Stop and Lock Ring Package, Pinion
14	191-1031	1	Thrust Washer Package, Armature (Use as Required)
15	191-0434	1	Brush Set, Service
16	191-1032	1	Yoke
17	191-0468	1	Cover, Solenoid
18	191-1134	1	Boot, Rubber - Part of Moving Core Assembly

DISTRIBUTOR PARTS

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
DISTRIBUTOR ASSEMBLY			
	166-0307	1	Pressure Cooled Sets
	160-1300	1	Vacu-Flo Cooled Sets
1	166-0235 ✓	1	Cap
2	166-0234 ✓	1	Rotor
3	166-0297 ✓	1	Plate, Breaker
4	166-0245 ✓	1	Point Set, Breaker
5	166-0061 ✓	1	Nut, Lock - Contact Screw
6	166-0606 ✓	1	Spring Set, Governor Weight
7	166-0607 ✓	1	Wick Package
8	166-0608 ✓	1	Terminal Stud and Parts Package
9	166-0310 ✓	1	Condenser
10	166-0609 ✓	1	Weight Set, Governor
11	509-0096 ✓	1	Seal, Base
12	166-0303 ✓	1	Gear, Drive
13	518-0216 ✓	1	Ring, Retaining
14	166-0610 ✓	1	Shaft, Drive
15	166-0611 ✓	1	Cam and Stop Plate
16	166-0612 ✓	1	Bearing and Parts Package
17	166-0623 ✓	1	Arm, Ignition Advance



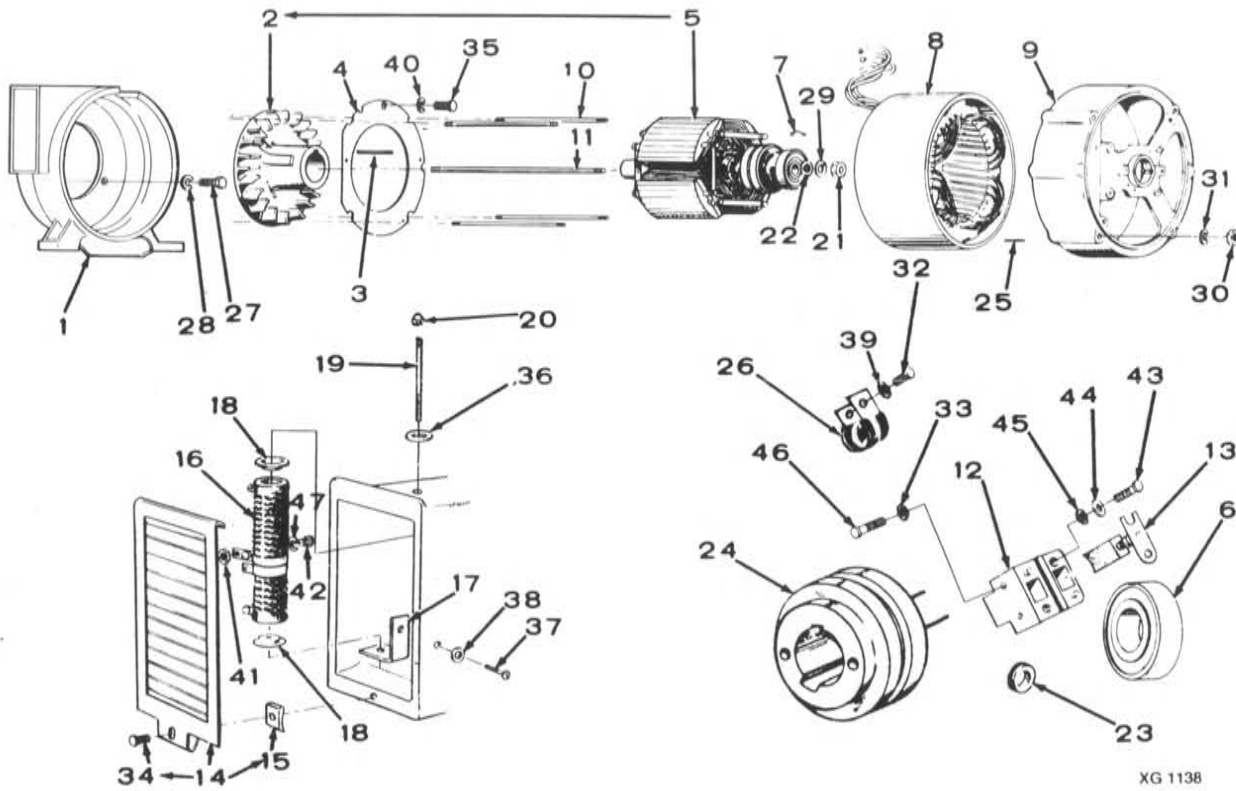
AIR HOUSING



AIR HOUSING

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	HOUSING, BLOWER			25	854-0010	2	Washer, Lock - IT (#10)
	134-1087	1	Pressure Cooled Sets	26	815-0235	1	Screw, Cap - Hex Head (1/4-20 x 5/8")
	134-1433	1	Vacu-Flo Cooled Sets	27	853-0013	1	Washer, Lock - ET (1/4")
2	134-1048	1	Housing, Cylinder Air - Front	28	800-0024	2	Screw, Cap - Hex Head (5/16-18 x 1/2")
3	134-1051	1	Housing, Cylinder Air - Rear	29	850-0045	2	Washer, Lock - Spring (5/16")
4	134-1418	1	Panel, Cylinder Air - Bottom	30	813-0098	2	Screw, Machine - Round Head (#10-32 x 3/8")
5	COVER, CYLINDER AIR HOUSING			31	853-0008	2	Washer, Lock - ET (#10)
	134-1119	1	Spec A	32	800-0007	3	Screw, Cap - Hex Head (1/4-20 x 1")
	134-1785	1	Spec B through P				
			Begin Spec R				
	134-1785	1	Gasoline Sets	33	850-0040	3	Washer, Lock - Spring (1/4")
	134-1910	1	Gas and Gas-Gasoline Sets	34	526-0115	3	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
6	PANEL, AIR HOUSING DOOR			35	812-0165	1	Screw, Machine - Round Head (1/4-20 x 4-1/2")
	134-1096	1	Spec A	36	854-0014	1	Washer, Lock - IT (1/4")
	134-1202	1	Begin Spec B	37	104-0528	1	Pointer, Timing - Vacu-Flo Cooled Sets
7	134-1089	2	Bracket, Air Housing Door	38	134-1415	1	Cover, Access Hole - Vacu-Flo Cooled Sets
8	134-1373	2	Screw, Door Panel				
9	134-1180	4	Washer, Door Panel	39	FITTING		
			(NOTE: Some early models used 8 for top cover)	508-0117		1	Grommet, Rubber - Spec A through AA
10	CLIP, RETAINER						
	870-0194	6	Pressure Cooled Sets (U Type)		517-0108	1	Plug, Cap - Begin Spec AB
	870-0178	8	Vacu-Flo Cooled Sets (J Type)	40	134-1109	1	Shroud - No. 1 Cylinder (Front) Vacu-Flo Cooled Sets
11	SUPPORT, BLOWER HOUSING			41	134-1337	1	Shroud - No. 4 Cylinder (Rear) Vacu-Flo Cooled Sets
	134-1088	1	Pressure Cooled Sets	42	134-1434	1	Cover, Cylinder Shroud - Vacu-Flo Cooled Sets
	134-1085	1	Vacu-Flo Cooled Sets	43	134-1435	1	Wrapper, Cylinder Shroud - Vacu-Flo Cooled Sets
12	134-1178	1	Grille	44	134-0944	4	Spring, Cylinder Shroud Wrapper - Vacu-Flo Cooled Sets
13	134-1092	3	Retainer, Grille	45	517-0035	1	Plug, Dot Button (1-1/16" Hole) Vacu-Flo Cooled Sets
14	134-1097	1	Baffle, Cylinder (Carburetor Side)	46	134-1427	1	Begin Spec R
15	134-1098	1	Baffle, Cylinder (Opposite Carburetor Side)	47	134-1428	1	Baffle, Front - Vacu-Flo Cooled Sets
16	508-0002	2	Grommet, Rubber (1/2" Hole) Bottom Cylinder Air Panel	48	134-1430	1	Baffle, Rear - Vacu-Flo Cooled Sets
17	800-0004	4	Screw, Cap - Hex Head (1/4-20 x 5/8")	49	134-1472	1	Baffle, Center - Vacu-Flo Cooled Sets
18	850-0040	4	Washer, Lock - Spring (1/4")	50	134-1429	1	Panel, Cylinder Air - Vacu-Flo Cooled Sets
19	526-0021	4	Washer, Flat (17/64" ID x 3/4" OD x 1/16" Thk)				
20	815-0235	6	Screw, Cap - Hex Head (1/4-20 x 5/8")				
21	854-0014	6	Washer, Lock - IT (1/4")				
22	815-0235	2	Screw, Cap - Hex Head (1/4-20 x 5/8")				
23	854-0014	2	Washer, Lock - IT (1/4")				
24	813-0097	2	Screw, Machine - Round Head (#10-32 x 5/16")				

GENERATOR—SPEC A THROUGH Z



OVERSPEED CONTROL (SWITCH)
SEE PAGE 66

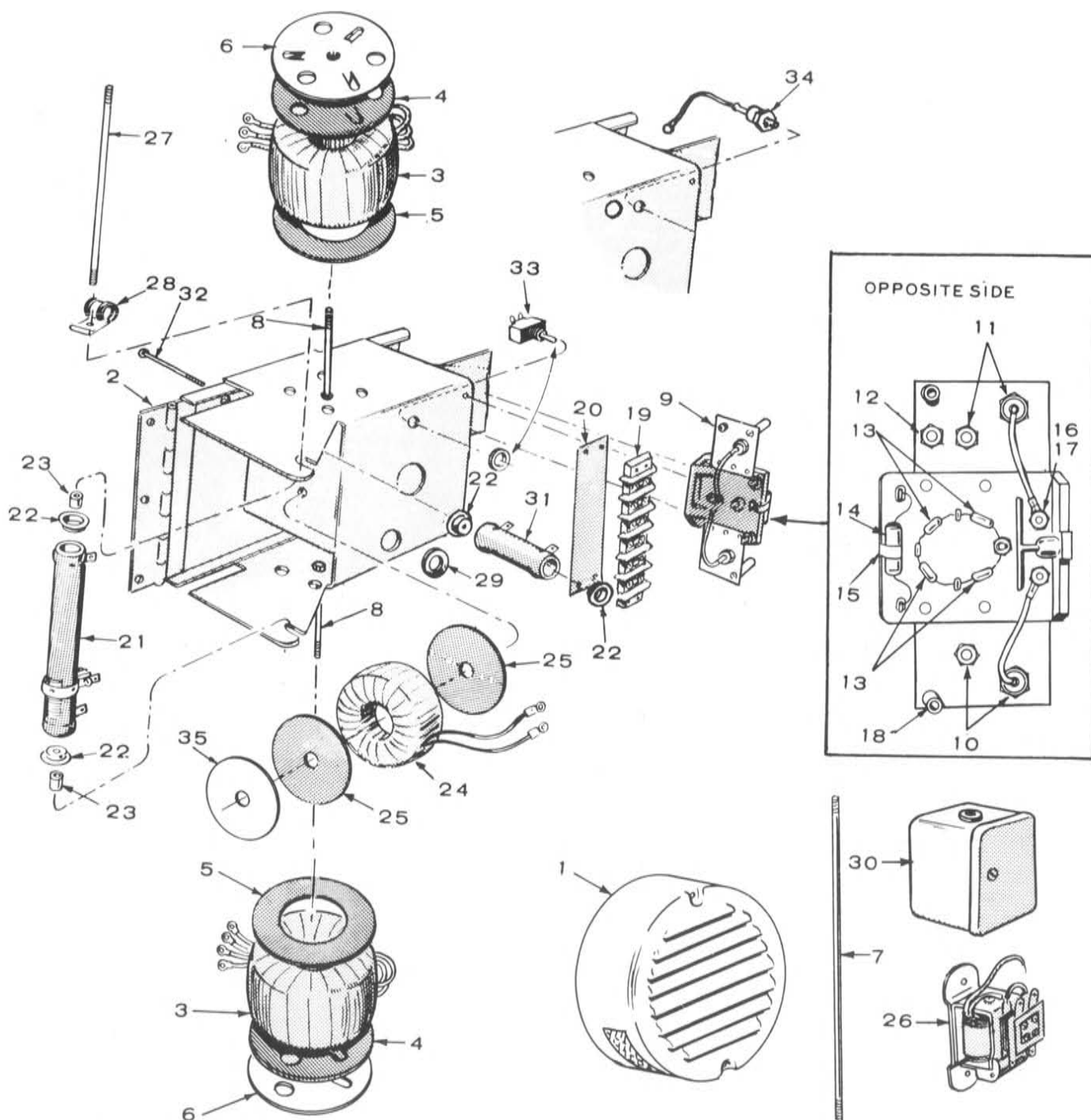
GENERATOR—SPEC A THROUGH Z

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	ADAPTER, GENERATOR			15	870-0177	1	#Nut, Speed (#10)
	231-0099	1	Spec A through J	16	304-0500	1	Resistor, Tapped Adjustable
	231-0111	1	Begin Spec K	17	232-1565	1	Bracket, Resistor Mounting
	231-0112	1	Mobile Electric Power Plants	18	304-0006	2	Washer, Resistor Centering
2	205-0064	1	*Fan, Generator	19	520-0620	1	Stud, Resistor Mounting
3	515-0103	1	*Key, Fan to Rotor	20	866-0001	1	Nut, Acorn (1/4-20)
4	234-0162	1	Baffle, Generator Air	21	NUT, ROTOR THROUGH STUD		
5	ROTOR ASSEMBLY, GENERATOR (Includes Parts Marked *)				232-1567	1	Spec A through D (7/16-14)
	201-1121	1	10.0 - 12.5 kw 60 Hz		870-0203	1	Begin Spec E (7/16-20)
	201-1122	1	All others	22	232-0200	1	Washer - Cone Shaped (Special) Rotor through Stud
6	510-0047	1	*Bearing, Rotor	23	GROMMET, RUBBER		
7	232-0596	1	Clip, Bearing Stop		508-0095	1	Air Baffle
8	STATOR, GENERATOR				508-0112	1	Lead Outlet
	220-0594	1	Single Phase 10.0 kw 60 Hz	24	204-0061	1	*Ring, Collector
			Three Phase 10.0 - 12.5 kw 60 Hz	25	516-0138	2	Pin, Roll (3/16" x 9/16") Alignment
	220-0594	1	120/208 Volt	26	332-0050	1	Clip - Brush Wires
	220-0628	1	120/240 Volt	27	SCREW, CAP — HEX HEAD		
	220-0673	1	277/480 Volt		800-0050	2	3/8-16 x 1"
			50 Hertz 12.5 kw		800-0051	2	3/8-16 x 1-1/4"
	220-0667	1	Single Phase	28	850-0050	4	Washer, Lock - Spring (3/8")
	220-0668	1	Three Phase	29	850-0055	1	Washer, Lock - Spring (7/16")
			60 Hertz 15.0 kw	30	862-0015	4	Nut, Hex (5/16 - 18)
	220-0601	1	Single Phase	31	850-0045	4	Washer, Lock - Spring (5/16")
			Three Phase	32	811-0098	1	Screw, Machine - Round Head Brass (#10-32 x 3/8")
	220-0595	1	120/208 Volt	33	856-0002	4	Washer, Lock - EIT (#8)
	220-0632	1	120/240 Volt	34	809-0046	1	#Screw, Sheet Metal - Round Head (#10 x 3/4")
	220-0655	1	277/480 Volt	35	813-0098	5	Screw, Machine - Round Head (#10-32 x 3/8")
	220-0651	1	347/600 Volt	36	850-0040	1	Washer, Lock - Spring (1/4")
	220-0651	1	600 Volt	37	812-0150	1	Screw, Machine - Round Head (1/4-20 x 5/8")
			X-Ray Applications	38	850-0040	1	Washer, Lock - Spring (1/4")
	220-0667	1	50 Hertz	39	856-0003	1	Washer, Lock - EIT (#10)
	220-0601	1	60 Hertz	40	850-0030	5	Washer, Lock - Spring (#10)
9	BELL, END			41	871-0010	1	Nut, Hex - Brass (#10-32)
	211-0138	1	Spec A through D	42	811-0098	1	Screw, Machine - Round Head Brass (#10-32 x 3/8")
			Begin Spec E	43	812-0085	4	Screw, Machine - Round Head (#8-32 x 1-1/8")
	211-0138	1	Sets Without Overspeed Switch	44	526-0049	4	Washer, Flat (13/64" ID x 7/16" OD x 1/32" Thk)
	211-0152	1	Sets With Overspeed Switch	45	856-0002	4	Washer, Lock - EIT (#8)
10	STUD, GENERATOR THROUGH			46	812-0086	4	Screw, Machine - Round Head (#8-32 x 1-1/4")
			10.0 - 12.5 kw 60 Hz	47	856-0003	1	Washer, Lock - EIT (#10)
	520-0607	4	Spec A through D				
	520-0638	4	Begin Spec E				
			All others				
	520-0460	4	Spec A through D				
	520-0640	4	Begin Spec E				
11	STUD, ROTOR THROUGH						
	520-0613	1	10.0 - 12.5 kw 60 Hz				
	520-0615	1	All others				
12	212-1064	2	Block, Collector Ring Brush				
13	214-0059	4	Brush, Collector Ring				
14	234-0163	1	Cover Assembly, Air Outlet (Includes Parts Marked #)				

* - Parts Included in Generator Rotor Assemblies.

- Parts Included in 234-0163 Cover Assembly.

GENERATOR EXCITER - SPEC A THROUGH Z



NOTE: 02SX1N1A used on all 60 hertz sets Spec A and B.
 06SX1N1A used on all 60 hertz sets Spec C and D.
 06SX1N1B used on all 60 hertz sets Spec E through M.
 06SX1N1B used on 120/240 volt, 120/208 volt and 600 volt, 3 phase, 60 hertz sets begin Spec P.
 06SX1N3B used on all 60 hertz sets (except 120/240 volt, 120/208 volt and 600 volt, 3 phase sets) begin Spec P.
 06SX51N1A used on all 50 hertz sets Spec A through D.
 06SX51N1B used on all 50 hertz sets Spec E through M.
 06SX51N1B used on 120/240 volt, 120/208 volt and 600 volt, 3 phase, 50 hertz sets begin Spec P.
 06SX51N3B used on all 50 hertz sets (except 120/240 volt, 120/208 volt and 600 volt, 3 phase sets) begin Spec P.

Check your set nameplate for correct magneciter number. Select the correct Part Number column that applies to your set.

GENERATOR EXCITER - SPEC A THROUGH Z

REF NO.	PART NUMBER	PART DESCRIPTION	QUANTITY USED									
			A	B	C	D	E	F	G	H	J	K
		02SX1N1A Use Column A	X									
		04SX1N1A Use Column B		X								
		04SX1N1B Use Column C			X							
		04SX1N3B Use Column D				X						
		06SX1N1A Use Column E					X					
		06SX1N1B Use Column F						X				
		06SX1N3B Use Column G							X			
		06SX51N1A Use Column H								X		
		06SX51N1B Use Column J									X	
		06SX51N3B Use Column K										X
	209-0001	Exciter, Complete (Less Cover)	1									
	209-0002	Exciter, Complete (Less Cover)		1								
	209-0003	Exciter, Complete (Less Cover)			1							
	209-0005	Exciter, Complete (Less Cover)				1						
	209-0007	Exciter, Complete (Less Cover)					1					
	209-0008	Exciter, Complete (Less Cover)						1				
	209-0010	Exciter, Complete (Less Cover)							1			
	209-0011	Exciter, Complete (Less Cover)								1		
	209-0012	Exciter, Complete (Less Cover)									1	
	209-0013	Exciter, Complete (Less Cover)										1
1	234-0154	• Cover, Exciter	1	1			1			1		
1	234-0185	• Cover, Exciter			1	1		1	1		1	1
2	234-0153	Panel Only, Exciter	1	1			1			1		
2	234-0188	Panel Only, Exciter			1	1		1	1		1	1
3	315-0084	Reactor, Gate	2									
3	315-0099	Reactor, Gate		2	2	2						
3	315-0102	Reactor, Gate					2	2	2			
3	315-0104	Reactor, Gate								2	2	2
4	232-1553	Gasket, Gate Reactor Mounting - Outer	2	2	2	2		2	2		2	2
4	232-1608	Gasket, Gate Reactor Mounting - Outer					2			2		
5	232-1551	Gasket, Gate Reactor Mounting - Inner	2	2	2	2	2	2	2	2	2	2
6	232-1552	Retainer, Gate Reactor	2	2	2	2		2	2		2	2
6	234-0191	Retainer, Gate Reactor					2			2		
7	520-0211	Stud, Gate Reactor Mounting	1	1			1			1		
8	800-0013	Screw, Cap - Hex Head (1/4-20 x 2-1/2")			2	2						
8	800-0015	Screw, Cap - Hex Head (1/4-20 x 3")						2	2		2	2
9	305-0259	Rectifier Assembly (Includes Parts Marked †)	1	1	1							
9	305-0387	Rectifier Assembly (Includes Parts Marked Δ)				1						
9	305-0264	Rectifier Assembly (Includes Parts Marked *)					1	1		1	1	
9	305-0388	Rectifier Assembly (Includes Parts Marked £)							1			1
10	305-0238	†Δ*£ Rectifier Only, Power Field (Negative)	2	2	2	2	2	2	2	2	2	2
11	305-0239	†Δ*£ Rectifier Only, Power Field (Positive)	2	2	2	2	2	2	2	2	2	2
12	305-0239	Δ£ Rectifier Only, Field Flash				1			1			1
13	305-0240	†Δ*£ Rectifier, Voltage Control	4	4	4	4	4	4	4	4	4	4

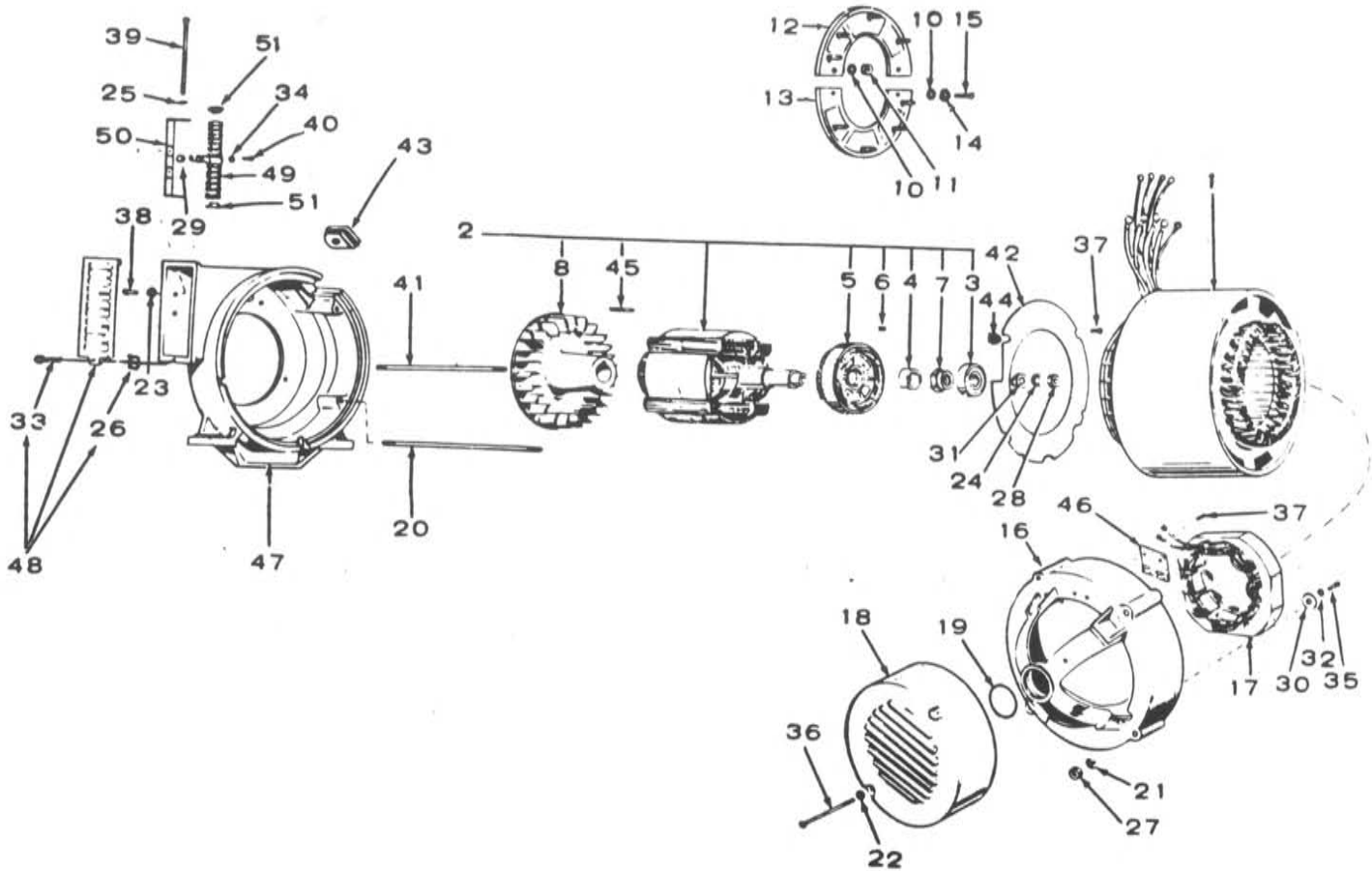
GENERATOR EXCITER - SPEC A THROUGH Z

REF NO.	PART NUMBER	PART DESCRIPTION	QUANTITY USED									
			A	B	C	D	E	F	G	H	J	K
14	304-0476	†ΔResistor (500-Ohm, 5 Watt)	1	1	1	1						
14	304-0512	*£Resistor (150-Ohm, 50 Watt)					1	1	1	1	1	1
15	304-0498	†Δ*£Clip, Resistor Mounting	1	1	1	1	1	1	1	1	1	1
16	332-0697	†Δ*£Stud, Terminal (Flat Head)	2	2	2	2	2	2	2	2	2	2
17	332-0698	†Δ*£Stud, Terminal (Extended Slotted Head)	1	1	1	1	1	1	1	1	1	1
18	870-0196	†Δ*£Fastener (Compression Type)	2	2	2	2	2	2	2	2	2	2
19	332-0699	Block, Terminal (6 Place)	1	1			1			1		
19	332-0745	Block, Terminal (7 Place)			1	1		1	1		1	1
20	332-0746	Strip, Block Marker (7 Place)			1			1			1	
20	332-0925	Strip, Block Marker (7 Place)				1			1			1
21	304-0489	Resistor, Fixed (200-Ohm, 50 Watt)	1									
21	304-0511	Resistor, Tapped - 500-Ohm (425 Fixed, 75 Adj.)		1			1			1		
21	304-0527	Resistor, Tapped - 500-Ohm (425 Fixed, 75 Adj.)			1	1		1	1		1	1
22	304-0015	Washer, Centering - Resistor	2	4	4	4	4	4	4	4	4	4
23	232-1473	Spacer, Resistor Mounting	2									
23	232-1550	Spacer, Resistor Mounting		2			2			2		
23	232-1474	Spacer, Resistor Mounting			2	2		2	2		2	2
24	315-0085	Reactor, Voltage Control	1									
24	315-0100	Reactor, Voltage Control		1	1	1	1	1				
24	315-0105	Reactor, Voltage Control								1	1	1
25	232-1548	Gasket, Voltage Control Reactor	2	2	2	2	2	2	2	2	2	2
26	307-0584	Relay, Field Build-Up	1									
27	520-0641	Stud, Tapped Resistor Mounting	1		1	1		1	1		1	1
27	812-0116	Screw, Tapped Resistor Mounting (RHMS #10-24 x 4-1/2")		1			1			1		
28	332-0050	Clip, Loop	1	1			1			1		
28	332-0052	Clip, Loop			1	1		1	1		1	1
29	508-0008	Grommet, Rubber (For 7/8" Hole)	1	1	1	1	1	1	1	1	1	1
30	307-0643	Cover, Field Relay	1									
31	304-0510	Resistor, Fixed (250-Ohm, 25 Watt)		1	1	1	1	1	1	1	1	1
32	813-0112	Screw, Fixed Resistor Mounting (RHSMS #10-32 x 2-1/2")		1	1	1	1	1	1	1	1	1
33	308-0175	Switch, Residual Reset			1			1			1	
34	305-0238	Rectifier, Power Field - Negative				1			1			1
35	526-0173	Washer, Retainer - Voltage Control Reactor	1	1	1	1	1	1	1	1	1	1
ASSOCIATED HARDWARE (NOT ILLUSTRATED)												
	812-0156	SCREW, MACHINE - ROUND HEAD 1/4-20 x 1-1/2"										
	813-0101	#10-32 x 9/16"										
	811-0098	#10-32 x 3/8" (Brass)										
	813-0098	#10-32 x 3/8"										
	815-0190	#8-32 x 3/8"										
	815-0198	#8-32 x 5/8"										
	815-0001	Screw, Machine - Binder Head (Brass) (#6-32 x 1/4")										

GENERATOR EXCITER - SPEC A THROUGH Z

REF NO.	PART NUMBER	PART DESCRIPTION	QUANTITY USED										
			A	B	C	D	E	F	G	H	J	K	
		WASHER, FLAT											
	526-0003	11/64" ID x 3/8" OD x 1/32" Thk					As Required						
	526-0048	.172" ID x 3/8" OD x 1/32" Thk					As Required						
	526-0049	.200" ID x 7/16" OD x 1/32" Thk					As Required						
	526-0179	7/32" ID x 5/8" OD x 1/16" Thk					As Required						
		WASHER, LOCK - SPRING											
	850-0030	#10					As Required						
	850-0040	1/4"					As Required						
	853-0005	Washer, Lock - ET (#8)					As Required						
		WASHER, LOCK - IT											
	854-0007	#8					As Required						
	854-0010	#10					As Required						
	854-0014	1/4"					As Required						
		NUT, HEX											
	860-0008	#8-32					As Required						
	860-0011	#10-24					As Required						
	862-0001	1/4-20					As Required						
	870-0053	#10-32					As Required						
	871-0005	#6-32 (Brass)					As Required						
	871-0007	#8-32 (Brass)					As Required						
	871-0010	#10-32 (Brass)					As Required						
		• - Use 234-0223 cover for housed sets.											
		† - Parts included in 305-0259 Rectifier Assembly.											
		Δ - Parts included in 305-0387 Rectifier Assembly.											
		• - Parts included in 305-0264 Rectifier Assembly.											
		£ - Parts included in 305-0388 Rectifier Assembly.											

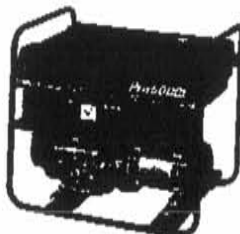
GENERATOR - BEGIN SPEC AA



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	STATOR, GENERATOR						
			50 Hertz				60 Hertz
	220-2024	1	10 kw 53,53C		220-2016	1	10.0 kw 3,3C
	220-2049	1	10 kw 55D,57,57X,518		220-2041	1	10.0 kw 4,4X,5D,18
	220-2050	1	10 kw 55D,57,57X,518		220-2284	1	10.0 kw 9X
			(Extended Stack)		220-2042	1	10.0 kw 4,4X,5D,18
	220-2677	1	10 kw 53, 53				(Extended Stack)
			(Environmentally Protected)		220-2669	1	10.0 kw 3,3C
	220-2659	1	10 kw 55D,57,57X,518				(Environmentally Protected)
			(Environmentally Protected)		220-2651	1	10.0 kw 4,4X,5D,18
			(Environmentally Protected)				(Environmentally Protected)
	220-2025	1	12.5 kw 53,53C		220-2017	1	12.5 kw 3,3C,B,J
	220-2050	1	12.5 kw 55D,57,57X,518,Z		220-2042	1	12.5 kw 4,4X,5D,18,C,D,G,L
	220-2051	1	12.5 kw 55D,57,57X,518		220-2285	1	12.5 kw 9X,H
			(Extended Stack)		220-2043	1	12.5 kw 4,4X,5D,18
	220-2678	1	12.5 kw 53,53C				(Extended Stack)
			(Environmentally Protected)		220-2670	1	12.5 kw 3,3C
	220-2660	1	12.5 kw 55D,57,57X,518				(Environmentally Protected)
			(Environmentally Protected)		220-2652	1	12.5 kw 4,4X,5D,18
			(Environmentally Protected)				(Environmentally Protected)
	220-2026	1	15.0 kw 53,53C		220-2018	1	15.0 kw 3,3C,B,J
	220-2051	1	15.0 kw 55D,57,57X,518		220-2043	1	15.0 kw 4,4X,5D,18,C,D,L
	220-2052	1	15.0 kw 55D,57,57X,518		220-2286	1	15.0 kw 9X,H
			(Extended Stack)		220-2044	1	15.0 kw 4,4X,5D,18
	220-2679	1	15.0 kw 53,53C				(Extended Stack)
			(Environmentally Protected)		220-2671	1	15.0 kw 3,3C
	220-2661	1	15.0 kw 55D,57,57X,518				(Environmentally Protected)
			(Environmentally Protected)		220-2653	1	15.0 kw 4,4X,5D,18
							(Environmentally Protected)

GENPLUS

1033 South 400 West, Salt Lake City, UT 84101

Cummins and Onan Generator Sets**FAX**Onan Pro
Series
5 models, 2500
to 6000

Date:

6/16/98

Number of pages including cover sheet:

2

Attention Of:

Mike Schmitt

Co. Name:

Onan Tech

Phone:

1-612-574-8070

Fax phone:

1-612-574-8048

CC:

**GENPLUS**

DIVISION OF CUMMINS INTERMOUNTAIN, INC.

Ralph Gilger
Parts Manager1033 South 400 West
Salt Lake City, Utah 84101
Phone: (801) 524-1322
FAX: (801) 524-1359

REMARKS:

☐ Urgent☒ For your review☐ Reply ASAP☐ Please comment

DISTRIBUTOR FOR ONAN IC AND RTC Genat Engine

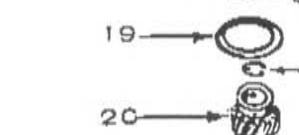
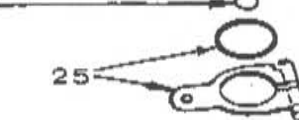
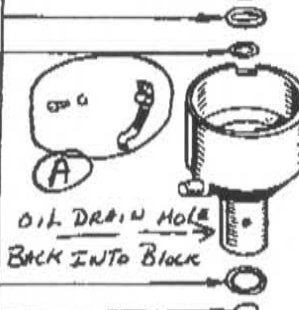
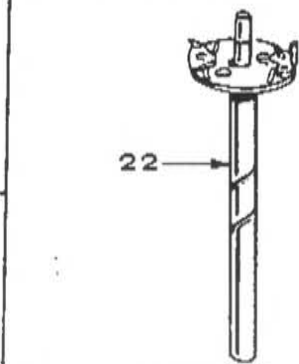
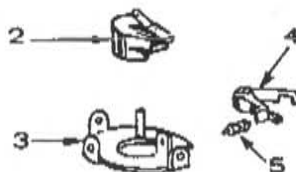
Page 2 includes info that I have gathered over the years.

THE HOLE THAT WE DISCUSSED IS THE OIL DRAIN/
RETURN HOLE FOR OIL TO RETURN INTERNALLY TO THE OIL PAN.THE CONDENSOR MOUNTS ON THE LARGE DIAMETER PORTION
OF THE DISTRIBUTOR MAIN HOUSING

ONAN

DISTRIBUTOR

JL - RJC



JL AIR PRESSURE COOLED 166-0307

JL VACUUM COOLED 160-1300

USE

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
RJC →	166-0309	1	Distributor Assembly, Includes Gear
	1 166-0235	1	Cap
	2 166-0234	1	Rotor
OVER	3 166-0297	1	Plate, Breaker
	4 166-0245	1	Point Set, Breaker
	5 166-0081	1	Nut, Lock, Contact, Screw
	7 166-0606	1	Spring Set, Governor-Weight
	12 166-0607	1	Wick Package
	13 166-0608	1	Terminal Stud & Parts Package
	15 166-0310	1	Condenser
	17 166-0609	1	Weight Set, Governor
	19 509-0096	1	Seal, Base
	20 166-0303	1	Gear, Drive
	21 518-0216	1	Ring, Retaining
	22 166-0610	1	Shaft, Drive
	23 166-0611	1	Cam & Stop Plate
	24 166-0612	1	Bearing & Parts Package
	25 - 166-0308 RJC	1	Bracket, Ring
	25-166-0623 JL		

NOTE 166-0825 ELECTRONIC IGNITION

(A) SPRING HINGE SNAP (BA) AUTOLITE #31-207

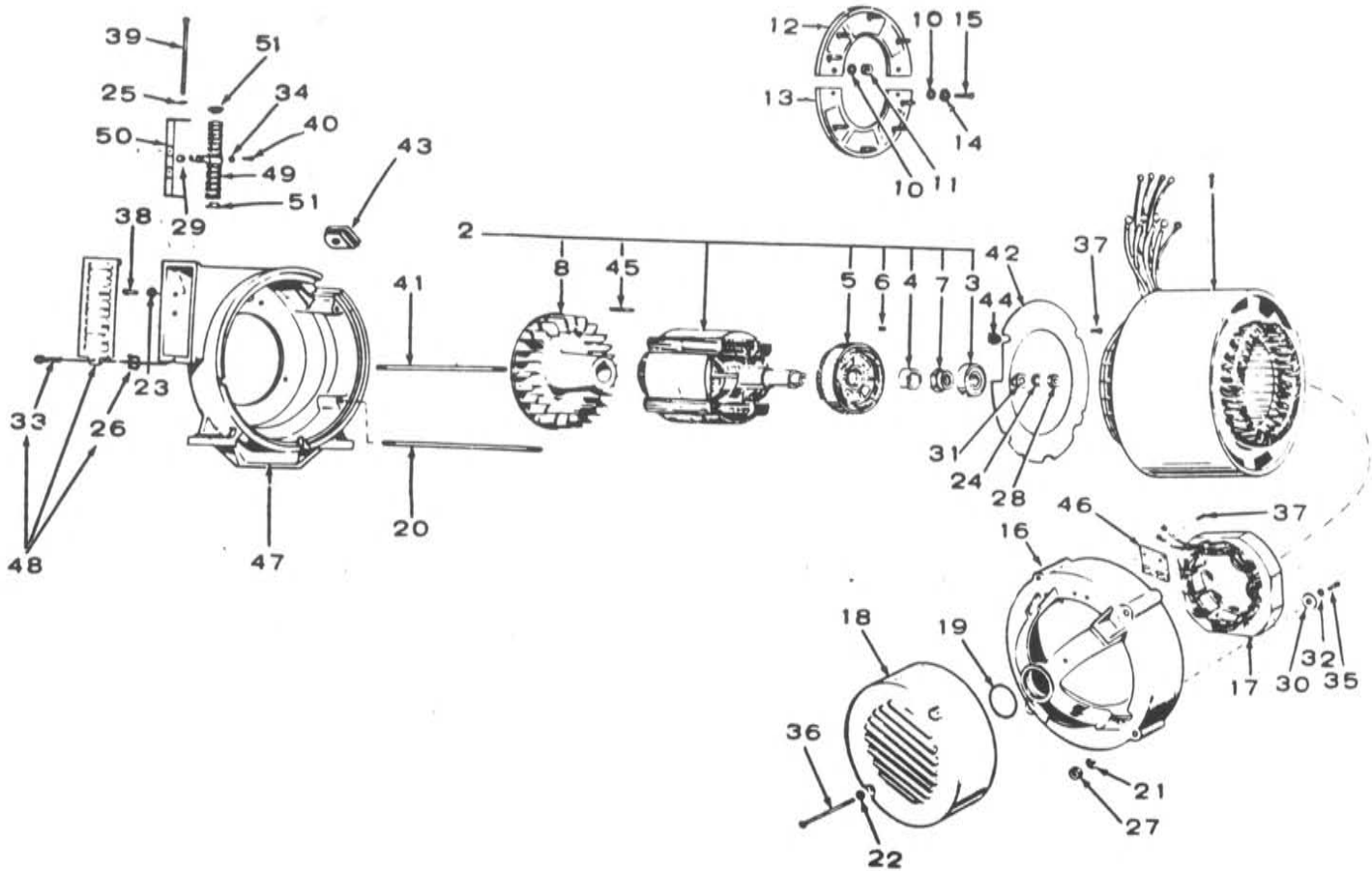
NOTE: ITEM #25 MAY HAVE TO BE REUSED OFF OLD DISTRIBUTOR.

#24 166-0612 BRG KIT PRESTOLITE #90-740

#3 166-0297 BREAKER PLATE, PRESTOLITE #IG81010C SPSTO PRESTOLITE #7-154

074-0220 (JUNE 1981)

GENERATOR - BEGIN SPEC AA



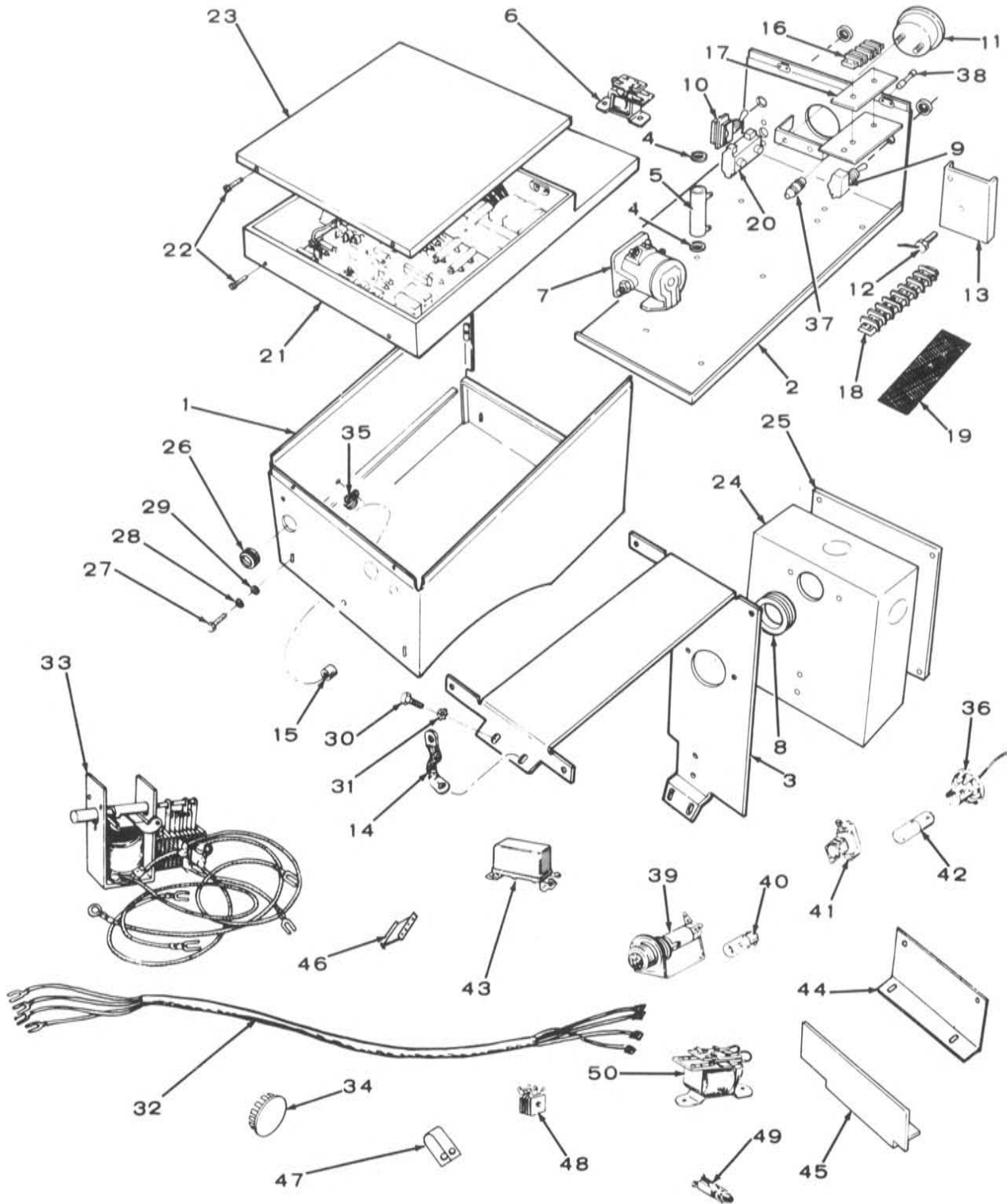
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	STATOR, GENERATOR						
			50 Hertz				60 Hertz
	220-2024	1	10 kw 53,53C		220-2016	1	10.0 kw 3,3C
	220-2049	1	10 kw 55D,57,57X,518		220-2041	1	10.0 kw 4,4X,5D,18
	220-2050	1	10 kw 55D,57,57X,518		220-2284	1	10.0 kw 9X
			(Extended Stack)		220-2042	1	10.0 kw 4,4X,5D,18
	220-2677	1	10 kw 53, 53				(Extended Stack)
			(Environmentally Protected)		220-2669	1	10.0 kw 3,3C
	220-2659	1	10 kw 55D,57,57X,518				(Environmentally Protected)
			(Environmentally Protected)		220-2651	1	10.0 kw 4,4X,5D,18
			(Environmentally Protected)				(Environmentally Protected)
	220-2025	1	12.5 kw 53,53C		220-2017	1	12.5 kw 3,3C,B,J
	220-2050	1	12.5 kw 55D,57,57X,518,Z		220-2042	1	12.5 kw 4,4X,5D,18,C,D,G,L
	220-2051	1	12.5 kw 55D,57,57X,518		220-2285	1	12.5 kw 9X,H
			(Extended Stack)		220-2043	1	12.5 kw 4,4X,5D,18
	220-2678	1	12.5 kw 53,53C				(Extended Stack)
			(Environmentally Protected)		220-2670	1	12.5 kw 3,3C
	220-2660	1	12.5 kw 55D,57,57X,518				(Environmentally Protected)
			(Environmentally Protected)		220-2652	1	12.5 kw 4,4X,5D,18
			(Environmentally Protected)				(Environmentally Protected)
	220-2026	1	15.0 kw 53,53C		220-2018	1	15.0 kw 3,3C,B,J
	220-2051	1	15.0 kw 55D,57,57X,518		220-2043	1	15.0 kw 4,4X,5D,18,C,D,L
	220-2052	1	15.0 kw 55D,57,57X,518		220-2286	1	15.0 kw 9X,H
			(Extended Stack)		220-2044	1	15.0 kw 4,4X,5D,18
	220-2679	1	15.0 kw 53,53C				(Extended Stack)
			(Environmentally Protected)		220-2671	1	15.0 kw 3,3C
	220-2661	1	15.0 kw 55D,57,57X,518				(Environmentally Protected)
			(Environmentally Protected)		220-2653	1	15.0 kw 4,4X,5D,18
							(Environmentally Protected)

GENERATOR - BEGIN SPEC AA

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
2	ROTOR			19	509-0094	1	Seal, Bearing ("O" Ring)
			50 Hertz	20	STUD, GENERATOR THROUGH		
	201-2156	1	10 kw 53,53C,55D,57,57X,518		520-0798	4	50 Hertz Sets
	201-2157	1	10 kw 55D,57,57X,518 (Extended Stack)		520-0797	4	60 Hertz Sets
	201-2311	1	10 kw 53,53C,55D,57,57X,518 (Environmentally Protected)		520-0798	4	12.5JC Sets
	201-2157	1	12.5 kw 53,53C,55D,57,57X, 518,Z	21	850-0050	4	15.0JC Sets
	201-2158	1	12.5 kw 55D,57,57X,518 (Extended Stack)	22	850-0040	2	Washer, Lock - Spring (3/8")
	201-2312	1	12.5 kw 53,53C,55D,57,57X, 518 (Environmentally Protected)	23	850-0040	2	Washer, Lock - Spring (1/4")
	201-2158	1	15.0 kw 53,53C,55D,57,57X, 518	24	850-0055	1	Washer, Lock - Spring (7/16")
	201-2159	1	15.0 kw 55D,57,57X,518 (Extended Stack)	25	853-0013	1	Washer, Lock (1/4" ET)
	201-2313	1	15.0 kw 53,53C,55D,57,57X, 518 (Extended Stack)	26	870-0177	1	Nut, Speed (#10)
			60 Hertz	27	862-0011	4	Nut, Hex (3/8-16)
	201-2156	1	10 kw 3,3C,4,4X,5D,18	28	870-0203	1	Nut, Hex (7/16-20)
	201-2156	1	10 kw 9X	29	871-0010	1	Nut, Hex - Brass (#10-32)
	201-2157	1	10 kw 4,4X,5D,18 (Extended Stack)	30	526-0260	2	Washer, Flat (Special)
	201-2311	1	10 kw 3,3C,4,4X,5D,18 (Environmentally Protected)	31	232-0200	1	Washer - Cone Shaped
	201-2157	1	12.5 kw 3,3C,4,4X,5D,18,B, C,D,G,J,L	32	853-0013	2	Washer, Lock (1/4" ET)
	201-2157	1	12.5 kw 9X,H	33	809-0046	1	Screw, Sheet Metal - Round Head (#10 x 3/4")
	201-2158	1	12.5 kw 4,4X,5D,18 (Extended Stack)	34	856-0003	1	Washer, Lock (#10 EIT)
	201-2312	1	12.5 kw 3,3C,4,4X,5D,18 (Environmentally Protected)	35	800-0004	2	Screw, Cap - Hex Head (1/4-20 x 5/8")
	201-2158	1	15.0 kw 3,3C,4,4X,5D,18,B, C,D,J,L	36	SCREW, MACHINE - ROUND HEAD (End Bell Cover Mounting)		
	201-2158	1	15.0 kw 9X,H		812-0165	2	Sets Without Housing
	201-2159	1	15.0 kw 4,4X,5D,18 (Extended Stack)		812-0167	2	Sets Without Overspeed Switch (1/4-20 x 4-1/4")
	201-2313	1	15.0 kw 3,3C,4,4X,5D,18 (Environmentally Protected)		812-0165	2	Sets With Overspeed Switch (1/4-20 x 6")
3	510-0112	1	*Bearing, Rotor	37	815-0194	6	Sets With Housing (1/4-20 x 4-1/2")
4	232-2398	1	*Spacer, Bearing				Screw, Hex Head - Thread Cutting with ET (#10-32 x 3/8") Board (2) and Baffle (4) Mounting
5	201-2151	1	*Rotor, Exciter	38	800-0004	2	Screw, Cap - Hex Head (1/4-20 x 5/8")
6	515-0094	1	*Key, Exciter Rotor	39	812-0169	1	Screw, Machine - Round Head (1/4-20 x 5-1/2")
7	870-0284	1	*Nut, Exciter Rotor Locking	40	811-0098	1	Screw, Machine - Round Head (Brass) (#10-32 x 3/8")
8	205-0105	1	*Fan, Generator	41	STUD, ROTOR THROUGH		
10	526-0008	12	*Washer, Flat (13/64" ID x 7/16" OD x 1/32" Thk)		520-0790	1	50 Hertz Sets
11	870-0131	8	*Nut, Hex (#10-32)		520-0789	1	60 Hertz Sets
12	358-0069	1	*Rectifier Assembly - Positive		520-0790	1	12.5JC Sets
13	358-0070	1	*Rectifier Assembly - Negative	42	234-0462	1	15.0JC Sets
14	853-0008	4	*Washer, Lock - ET (#10)	43	508-0112	1	Baffle, Air
15	813-0100	4	*Screw, Machine - Round Head (#10-32 x 1/2")			1	Grommet, Rubber - Generator Adapter
16	211-0237	1	Bell, End	44	508-0095	1	Grommet, Rubber - Air Baffle
17	220-2009	1	Stator, Exciter	45	515-0103	1	*Key, Fan to Rotor
18	COVER, END BELL			46	232-2418	1	Board, Connection
			Sets Without Housing	47	231-0161	1	Adapter, Generator
	234-0185	1	Sets Without Generator Space Heater or Overspeed Switch	48	234-0493	1	Cover Assembly, Air Outlet
	234-0498	1	Sets With Overspeed Switch	49	304-0500	1	Resistor, Tapped - Adjustable
	234-0542	1	Sets With Generator Space Heater	50	232-2399	1	Bracket, Resistor Mounting
	234-0543	1	Sets With Generator Space Heater and Overspeed Switch	51	304-0006	2	Washer, Centering - Resistor Mounting
			Sets With Housing				
	234-0223	1	Sets Without Generator Space Heater				
	234-0541	1	Sets With Generator Space Heater				

* - Parts Included in Generator Rotor Assemblies.

CONTROL



XES 1133-2

CONTROL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-1962	1	Box, Control
2	PANEL, CONTROL		
	301-1961	1	Sets Without Indicator Lamps
	301-2376	1	Sets With 1 or 2 Indicator Lamps
	301-3567	1	Sets With 3 Indicator Lamps
3	301-3683	1	Saddle, Control Box - Begin Spec AA
4	WASHER, FIBER - Resistor Mounting		
	508-0015	2	Sets Without Low Oil Pressure Switch
	508-0015	4	Sets With Low Oil Pressure Switch
5	RESISTOR, FIXED		
	304-0032	1	15 Ohm, 10 Watt — R11
	304-0217	1	1 Ohm, 10 Watt - Sets with Low Oil Pressure Switch — R12 Begin Spec G
6	307-0623	1	Relay, Ignition
7	RELAY, START SOLENOID		
	307-1046	1	Spec A through Z
	307-0845	1	Begin Spec AA
8	GROMMET, RUBBER - Output Box		
	508-0117	1	Spec A through Z (1-3/8" Hole)
	508-0183	1	Begin Spec AA (1-3/4" Hole)
9	308-0154	1	Switch, Start/Stop (Housed and Unhoused Sets)
10	308-0002	1	Switch, Selector (Manual or Electric Start)
11	302-1366	1	Ammeter Kit, Charge (5-0-5) Includes Mounting Hardware
12	305-0673	1	Kit, Rectifier
13	305-0254	1	Bracket, Rectifier Mounting
14	337-0036	1	Strap, Ground - Control Box (Begin Spec AA)
15	402-0078	4	Mount, Rubber - Control Box
16	332-0537	1	Block, Terminal (4 Place)
17	332-0566	1	Strip, Marker (4 Place)
18	332-0706	1	Block, Terminal (8 Place)
19	332-0739	1	Strip, Marker (8 Place)
20	320-0104	1	Limiter, Cranking - Sets With Low Oil Pressure Switch (Begin Spec G)
21	REGULATOR, VOLTAGE - (Begin Spec AA (See Separate Group for Components))		
	305-0589	1	Sets Without Voltage Adjustment
	305-0590	1	Sets With Voltage Adjustment
22	815-0350	8	Screw, Hex Washer Head - Tapping (#10-32 x 3/8")
23	COVER		
	301-1963	1	Control Box - Spec A through Z
	301-3714	1	Voltage Regulator - Begin Spec AA
24	BOX, OUTPUT		
	301-1978	1	Spec A through Z
	301-3682	1	Begin Spec AA
25	301-0856	1	Cover, Output Box
26	508-0001	1	Grommet, Rubber (1-1/16" Hole)
27	800-0024	4	Screw, Cap - Hex Head (5/16-18 x 1/2")
28	850-0045	4	Washer, Lock - Spring (5/16")
29	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)

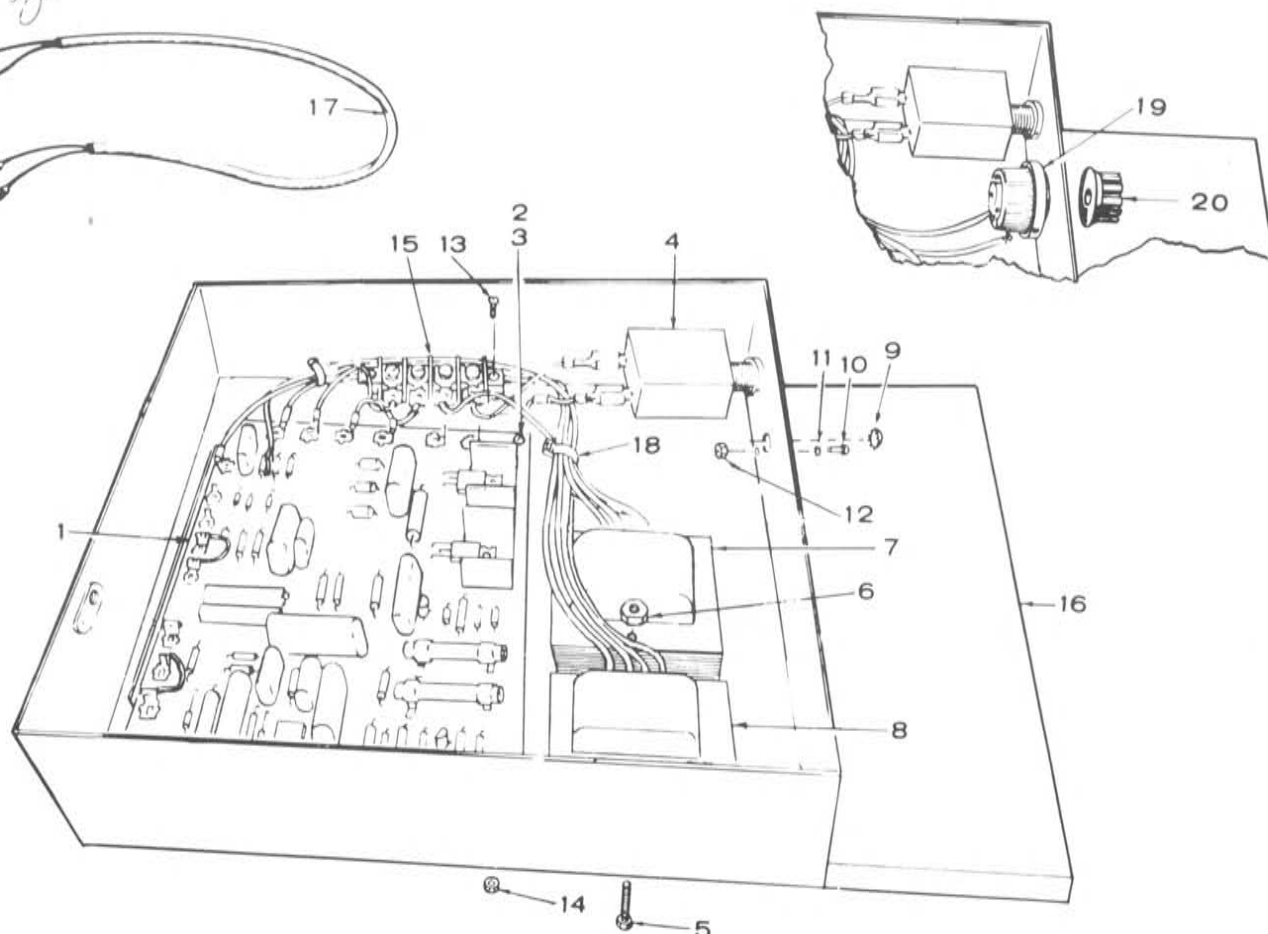
320-0259

When Used with Alarms, etc

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
30	815-0236	4	Screw, Self Tapping - Hex Head (5/16-18 x 5/8")
31	856-0008	4	Washer, Lock - EIT (5/16")
32	HARNESS, WIRING		
	338-0305	1	Control to Housing Start/Stop (Housed Sets)
	338-0495	1	Control to Output Box (Housed Sets)
	338-0337	1	High Air Temperature Switch (Sets With Vacu-Flo Cooling)
33	RELAY, LATCHING		
	307-1129	1	Sets With High Air Temperature Switch or Overspeed Switch (Includes Leads)
	307-1519	1	Sets With High Air Temperature Switch and Overspeed Switch (Includes Two Relays With Leads)
34	PLUG, DOT BUTTON		
	517-0019	1	1/2" Hole
	517-0012	1	5/8" Hole
	517-0139	1	11/16" Hole
35	332-0052	1	Clip, Wire - Begin Spec AA
36	322-0072	2	Socket, Panel Light - Housed Sets
37	321-0175	1	Holder, Fuse - Use Began Serial Number B780304257 During Spec AA
38	321-0146	1	Fuse - 10 Amp - Use Began Serial Number B780304257 During Spec AA
39	322-0069	As Req	Holder, Indicator Lamp - Sets With Indicator Lamp
40	322-0004	As Req	Lamp, Indicator - Sets With Indicator Lamp
41	308-0002	1	Switch, Panel Light - Housed Sets
42	322-0004	2	Lamp, Panel Light - Housed Sets
43	307-0597	1	Relay, Ignition Start - Spec A through Z
44	BRACKET, CONTROL BOX MOUNTING (Left Hand) Spec A through Z		
	301-1979	1	Unhoused Sets Without Switchboard Control
	301-1965	1	Unhoused Sets With Switchboard Control
45	301-1964	1	Bracket, Control Box Mounting (Right Hand) Spec A through Z
46	332-0750	1	Kit, Polarity Marker - Used on Early Models
47	416-0096	2	Clamp, Harness Support
48	305-0197	1	Rectifier, Full Wave - Sets With Low Oil Pressure Switch (Spec A through F)
49	308-0091	1	Switch, Reset - Sets With Low Oil Pressure Switch (Spec A through F)
50	307-0614	1	Relay, Latching - Sets With Low Oil Pressure Switch (Spec A through F)

*Specs
Before need
Kit 305-0899*

VOLTAGE REGULATOR—BEGIN SPEC AA



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
REGULATOR, VOLTAGE			
	305-0589	1	Without Voltage Adjustment (Includes Parts Marked *)
	305-0590	1	With Voltage Adjustment (Includes Parts Marked #)
1	300-1540	1	*#Board, Voltage Regulator - Begin Spec AB (Replaces 300-1006 Board Used Begin Spec AA through Serial Number F760142041 During Spec AA and 300-1404 Board Begin Serial Number F760142042 During Spec AA Until Spec AB) Refer to Printed Circuit Board Parts Catalog Number 900-0234 for Board Components
2	815-0190	4	*#Screw, Tapping - Round Head (#8-32 x 3/8")
3	853-0005	4	*#Washer, Lock - ET (#8)
4	320-0505	1	*#Breaker, Circuit
5	812-0070	4	*#Screw, Machine - Round Head (#6-32 x 1-1/4")

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
6	870-0183	4	*#Nut, Hex - With ET (#6-32)
7	315-0391	1	*#Reactor
8	315-0386	1	*#Transformer, Voltage
9	517-0045	1	*Plug, Dot Button
10	812-0027	1	*#Screw, Machine - Round Head (#4-40 x 1/4")
11	853-0001	1	*Washer, Lock - ET (#4)
12	860-0003	1	*Nut, Hex (#4-40)
13	812-0063	2	*#Screw, Machine - Round Head (#6-32 x 1/2")
14	870-0183	2	*#Nut, Hex - With ET (#6-32)
15	332-1647	1	*#Block, Terminal
16	301-3713	1	*#Panel, Mounting
17	HARNES, WIRING - Voltage Regulator to Exciter Stator		
	338-0744	1	Sets Without Overspeed Switch
	338-0917	1	Sets With Overspeed Switch
18	332-0942	8	*#Tie, Cable
19	303-0103	1	#Rheostat
20	303-0194	1	#Knob

* - Parts Included in 305-0589 Voltage Regulator Without Adjustment.

- Parts Included in 305-0590 Voltage Regulator With Adjustment.

402-0354 Mount - Shock
Back of Bud



SERVICE KITS AND MISCELLANEOUS

NOTE: For other kits refer to the related group.

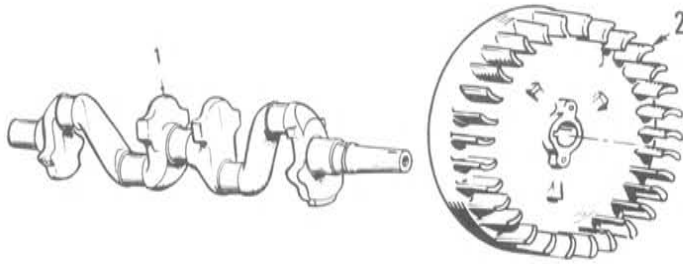
PART NO.	QTY. USED	PART DESCRIPTION
98-1100	1	Decal Kit
168-0084	1	Gasket Kit, Generator Set
OVERHAUL KIT, GENERATOR SET		
522-0199	1	Spec A through Q
522-0235	1	Begin Spec R
PAINT, TOUCH-UP (13 oz. Pressurized Can)		
525-0137		Metallic Green
525-0305		Non-Metallic Green
525-0454		Greige - Enamel

168-0208 Valve Grind Kit

SPECIAL PARTS SECTION

PENNSYLVANIA APPROVED GENERATOR SETS

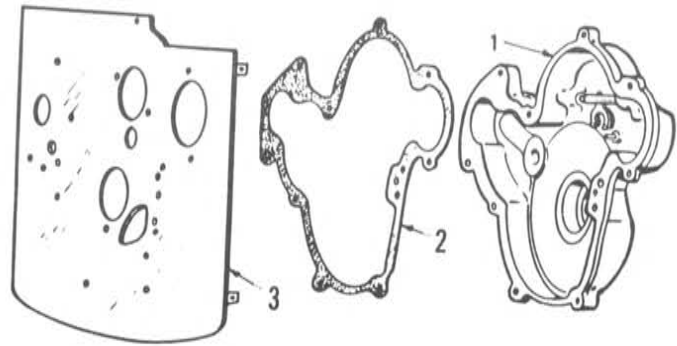
CRANKSHAFT AND FLYWHEEL - SPEC A THROUGH Q



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	104-0477	1	Crankshaft
2	134-1446	1	Flywheel Assembly - Includes Hub and Mounting Hardware

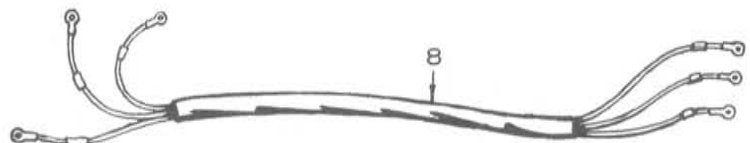
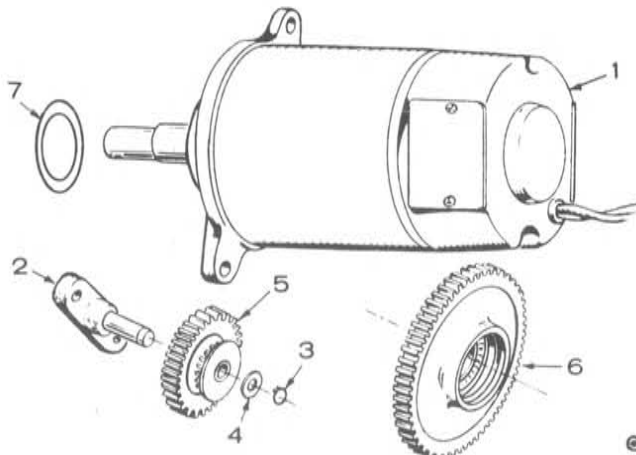
GEARCASE - SPEC A THROUGH Q

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	103-0252	1	Gearcase Assembly
2	103-0231	1	Gasket, Gearcase
3	103-0225	1	Backplate, Gearcase



STARTER - SPEC A THROUGH Q

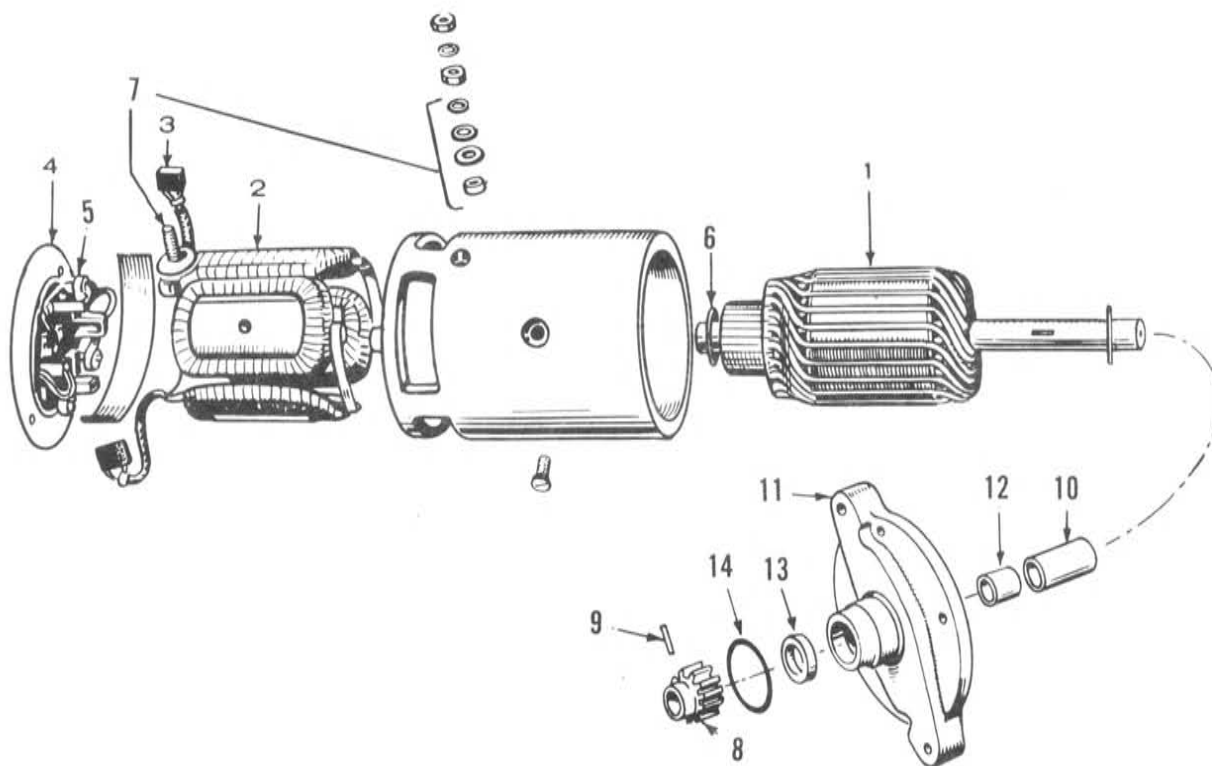
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	191-0453	1	Starter - Includes Pinion Gear and Pin (See Separate Group for Components)
2	191-0342	1	Base and Shaft, Idler Gear
3	518-0196	1	Ring, Retaining - Idler Gear
4	526-0175	1	Washer, Thrust - Idler Gear
5	191-0457	1	Gear Assembly, Idler
6	191-0354	1	Gear and Clutch Assembly, Crankshaft
7	509-0093	1	Seal, "O" Ring - Starter Mounting
8	338-0335	1	Harness, Starter to Control



SPECIAL PARTS SECTION

PENNSYLVANIA APPROVED GENERATOR SETS

STARTER PARTS - SPEC A THROUGH Q

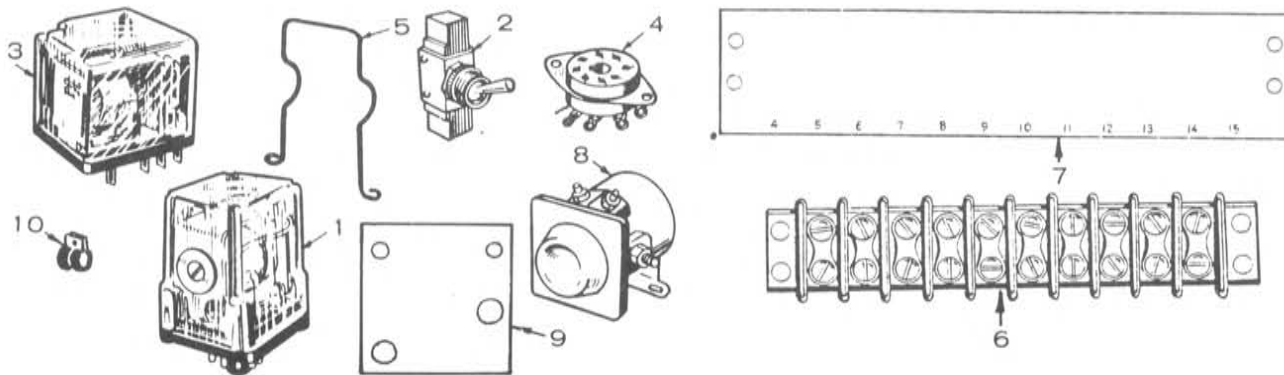


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	191-0453	1	Starter
1	191-0452	1	Armature
2	191-1017	1	Coil Assembly, Field
3	191-0513	1	Brush Set, Service
4	191-1018	1	Head Assembly, Commutator End
5	191-1020	1	Spring, Brush (Set of 4)
6	191-1021	1	Washer, Armature Thrust (Package) Use as required.
7	191-1022	1	Stud, Terminal (Package)
8	191-0450	1	Gear, Pinion
9	516-0154	1	Pin, Pinion Gear
10	191-0451	1	Spacer, Armature to Adapter
11	191-0448	1	Adapter
12	191-0329	1	Bushing, Adapter
13	509-0092	1	Seal, Oil Armature Shaft - Front
14	509-0093	1	Seal, "O" Ring Starter Motor Mounting

SPECIAL PARTS SECTION

PENNSYLVANIA APPROVED GENERATOR SETS

CONTROL - SPEC A THROUGH Z



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	307-0773	1	Relay - Start Disconnect and Ignition
2	308-0005	1	Switch
3	307-0860	1	Relay, Field Build-up
4	323-0321	1	Socket, Relay
5	307-0778	1	Spring, Hold-down - Relay

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
6	332-0751	1	Block, Terminal (10 Place)
7	332-1235	1	Strip, Marker (10 Place)
8	307-0845	1	Solenoid, Start - Begin Spec L
9	306-0195	1	Bracket, Solenoid Mounting
10	332-0052	1	Clip, Tinnerman

OIL BASE - BEGIN SPEC K



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	CUSHION, VIBRATION (Cone Shaped) Generator End		
	402-0287	2	Vacu-Flo Cooled Sets and Sets not Housed or Skid Mounted
	402-0286	2	Housed and Skid Mounted Sets

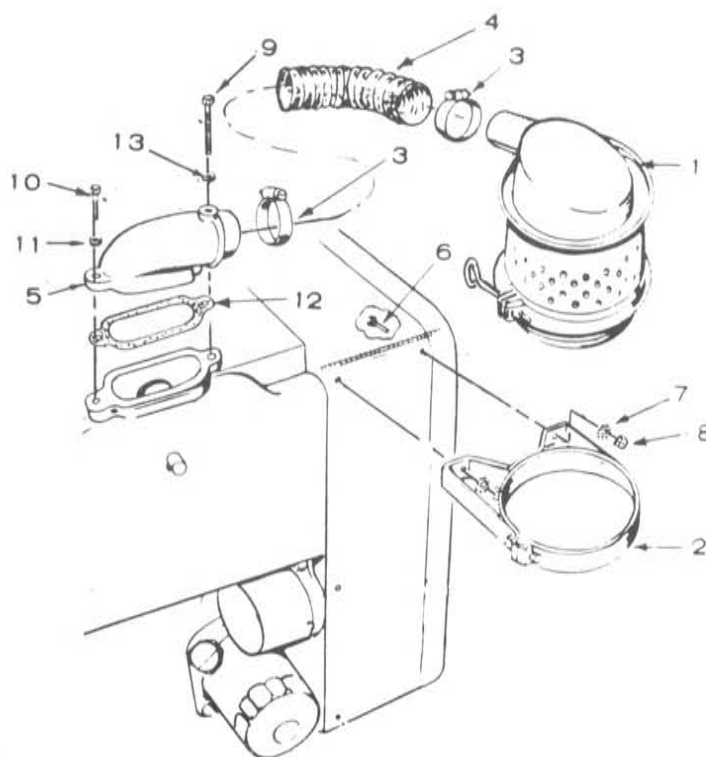
FUEL SYSTEM (GAS, GAS-GASOLINE AND LPG) (NOT ILLUSTRATED)

PART NO.	QTY. USED	PART DESCRIPTION
149-0558	1	Strainer
307-0312	1	Valve, Fuel
416-0325	1	Hydrometer

OPTIONAL PARTS SECTION

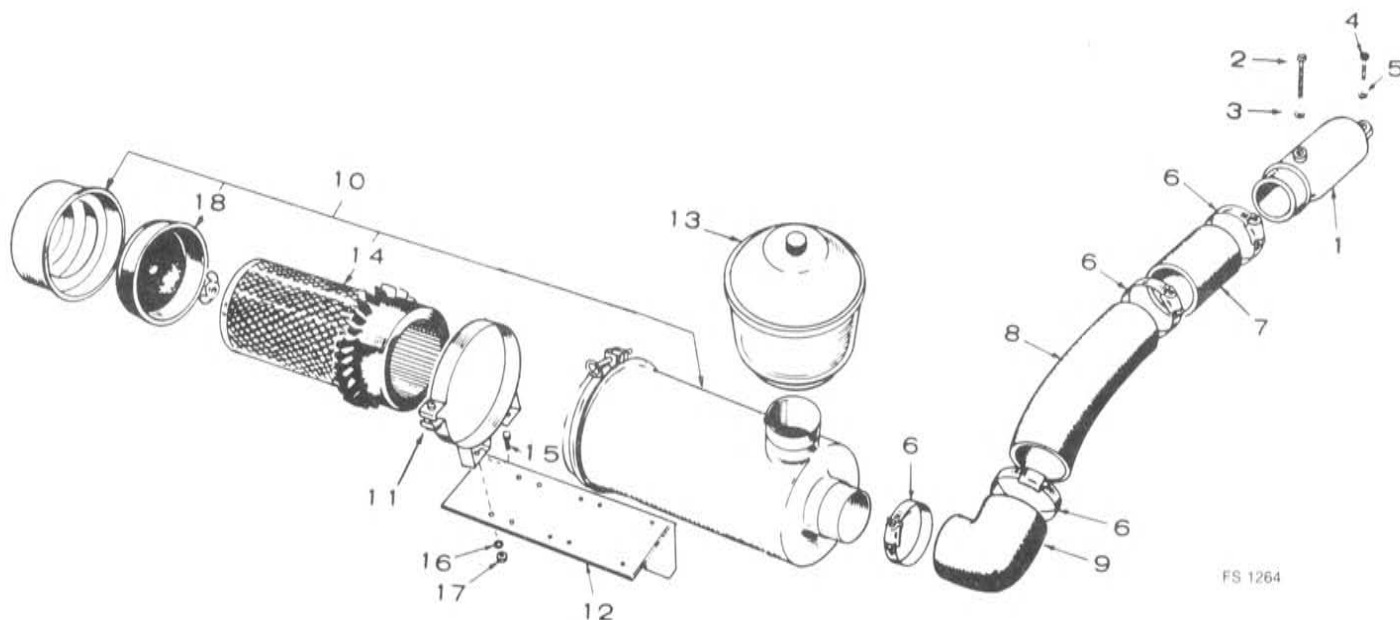
This section contains illustrated parts listings of factory installed options. Options may not be applicable to all models; for field conversions additional parts are usually required.

OIL BATH AIR CLEANER — OPTIONAL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0500	1	Cleaner, Air
2	140-0519	1	Band, Air Cleaner
3	503-0274	2	Clamp, Hose
4	503-0444	1	Hose, Air Cleaner
5	140-0645	1	Adapter, Air Cleaner
6	800-0003	2	Screw, Cap - Hex Head (1/4-20 x 1/2")
7	850-0040	2	Washer, Lock - Spring (1/4")
8	862-0001	2	Nut, Hex (1/4-20)
9	800-0015	1	Screw, Cap - Hex Head (1/4-20 x 3")
10	800-0007	1	Screw, Cap - Hex Head (1/4-20 x 1")
11	850-0040	1	Washer, Lock - Spring (1/4")
12	140-0584	1	Gasket, Adapter Mounting
13	526-0108	1	Washer, Flat (17/64" ID x 7/16" OD x 1/32" Thk)

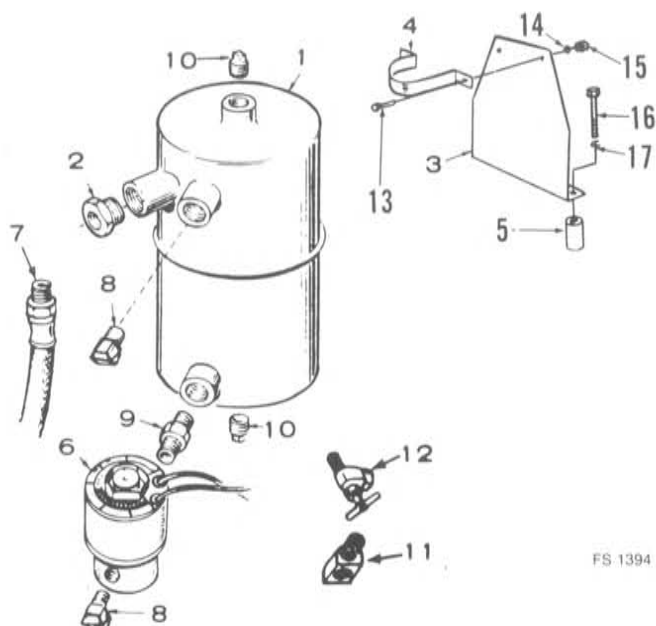
CONTRACTOR AIR CLEANER - OPTIONAL



FS 1264

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-0645	1	Adapter, Air Cleaner Hose
2	800-0015	1	Screw, Cap - Hex Head (1/4-20 x 3")
3	526-0108	1	Washer, Flat (17/64" ID x 7/16" OD x 1/32" Thk)
4	800-0007	1	Screw, Cap - Hex Head (1/4-20 x 1")
5	850-0040	1	Washer, Lock - Spring (1/4")
6	503-0274	4	Clamp, Hose
7	503-0330	1	Hose, Connector (Rubber) - 2" Long
8	140-0740	1	Tube, Air Induction
9	503-0419	1	Elbow (Rubber)
10	140-0721	1	Cleaner, Air (Includes Element and Baffle)
11	140-0722	2	Band, Air Cleaner Mounting
12	140-1271	1	Bracket, Air Cleaner Mounting
13	140-0723	1	Pre-Cleaner, Air Cleaner
14	140-0765	1	Element, Air Cleaner
15	800-0024	4	Screw, Cap - Hex Head (5/16-18 x 1/2")
16	850-0045	4	Washer, Lock - Spring (5/16")
17	862-0015	4	Nut, Hex (5/16-18)
18	140-1267	1	Baffle, Air Cleaner

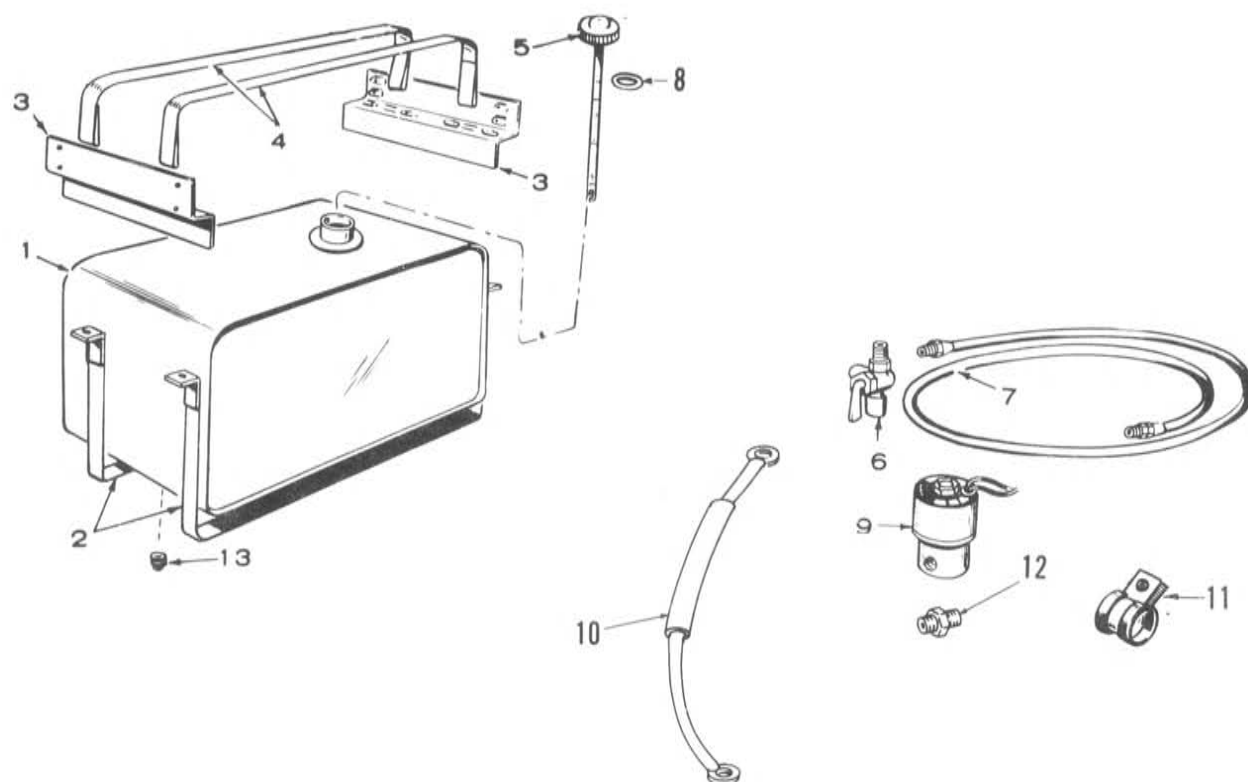
DAY TANK — OPTIONAL



FS 1394

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	TANK, DAY			8	502-0053	2	Elbow, Male - 45°
	159-0294	1	One Quart				(Brass) Solenoid Valve to
	159-0746	1	Two Quart				Carburetor Line (1) and
2	159-0705	1	Reducer, Restricted				Day Tank to Fuel Pump
3	BRACKET, MOUNTING						Line (1)
	159-0759	1	One Quart	9	502-0082	1	Nipple, Hex - 1/8" (Brass)
	159-0826	1	Two Quart	10	505-0057	2	Plug, Pipe - Square Head (1/8")
4	BAND, MOUNTING			11	502-0002	2	Elbow, Inverted Flare - 90°
	159-0121	1	One Quart				(Brass) Fuel Pump and
	159-0825	1	Two Quart				Carburetor Inlet - Begin
5	159-0761	2	Spacer, Mounting - Bracket				Spec J
			to Rocker Cover	12	504-0007	1	Valve, Fuel Pump Inlet
6	307-0565	1	Valve, Solenoid	13	800-0005	2	Screw, Cap - Hex Head (1/4-20
7	LINE, FUEL						x 3/4")
	501-0005	1	Main Tank to Day Tank	14	850-0040	2	Washer, Lock - Spring (1/4")
	501-0008	2	Day Tank to Fuel Pump (1)	15	860-0013	2	Nut, Hex (1/4-20)
			and Day Tank to Carburetor	16	800-0039	2	Screw, Cap - Hex Head
			(1)				(5/16-18 x 3-1/2")
				17	850-0045	2	Washer, Lock - Spring (5/16")

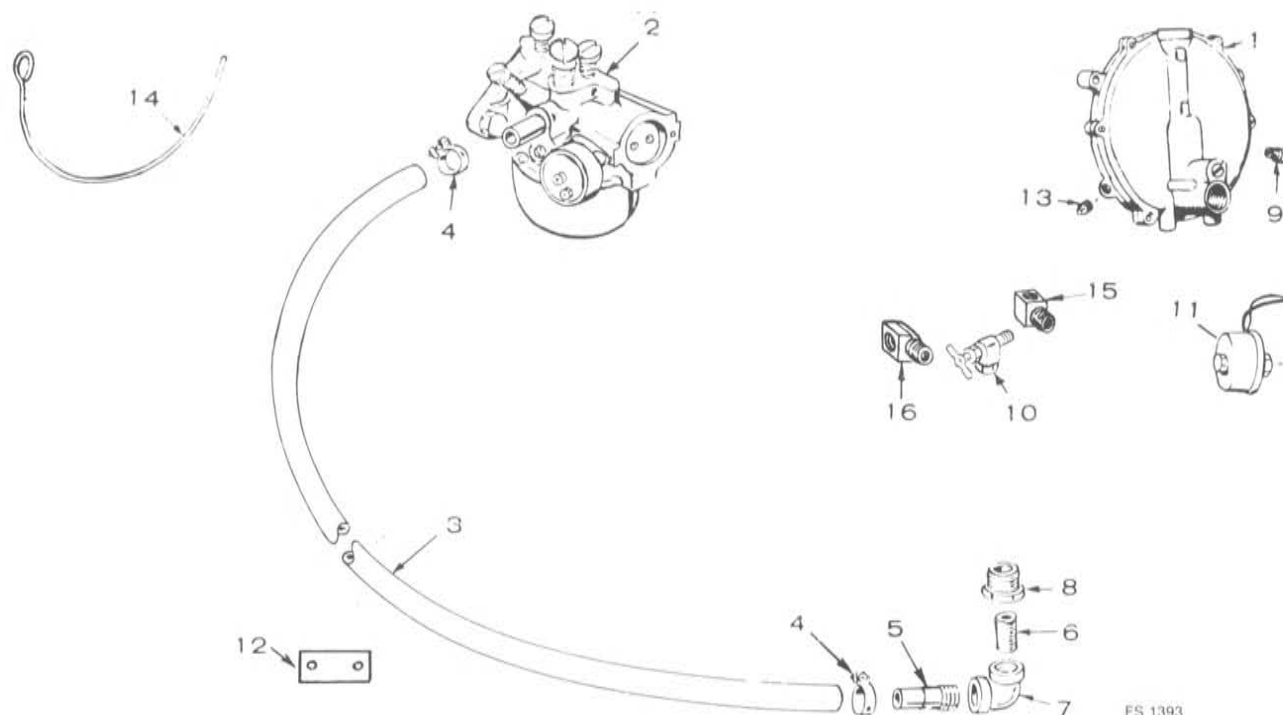
FUEL TANK (HOUSED SETS) — OPTIONAL



FS 1395

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	159-0799	1	Tank Assembly, Fuel - Complete (Includes All Listed Parts)
1	159-0788	1	Tank, Fuel - 15 Gallon
2	159-0786	2	Strap, Mounting
3	159-0789	2	Bracket, Support
4	159-0787	2	Strap, Hold-down
5	159-0512	1	Cap and Indicator
6	504-0004	1	Valve, Shutoff
7	501-0007	1	Line, Fuel - Flexible (24")
8	159-0751	1	Gasket, Fuel Cap
9	307-0565	1	Valve, Fuel Solenoid
10	336-1424	1	Lead - Control to Fuel Solenoid Valve
11	332-0050	1	Clip, Fuel Line
12	502-0082	1	Nipple, Hex - 1/8" (Brass)
13	505-0057	1	Plug, Pipe (1/8")
HARDWARE, MOUNTING - Not Illustrated			
	800-0009	4	Screw, Cap - Hex Head (1/4-20 x 1-1/2")
	821-0010	8	Screw, Locking Head (1/4-20 x 7/8")
	850-0040	4	Washer, Lock - Spring (1/4")

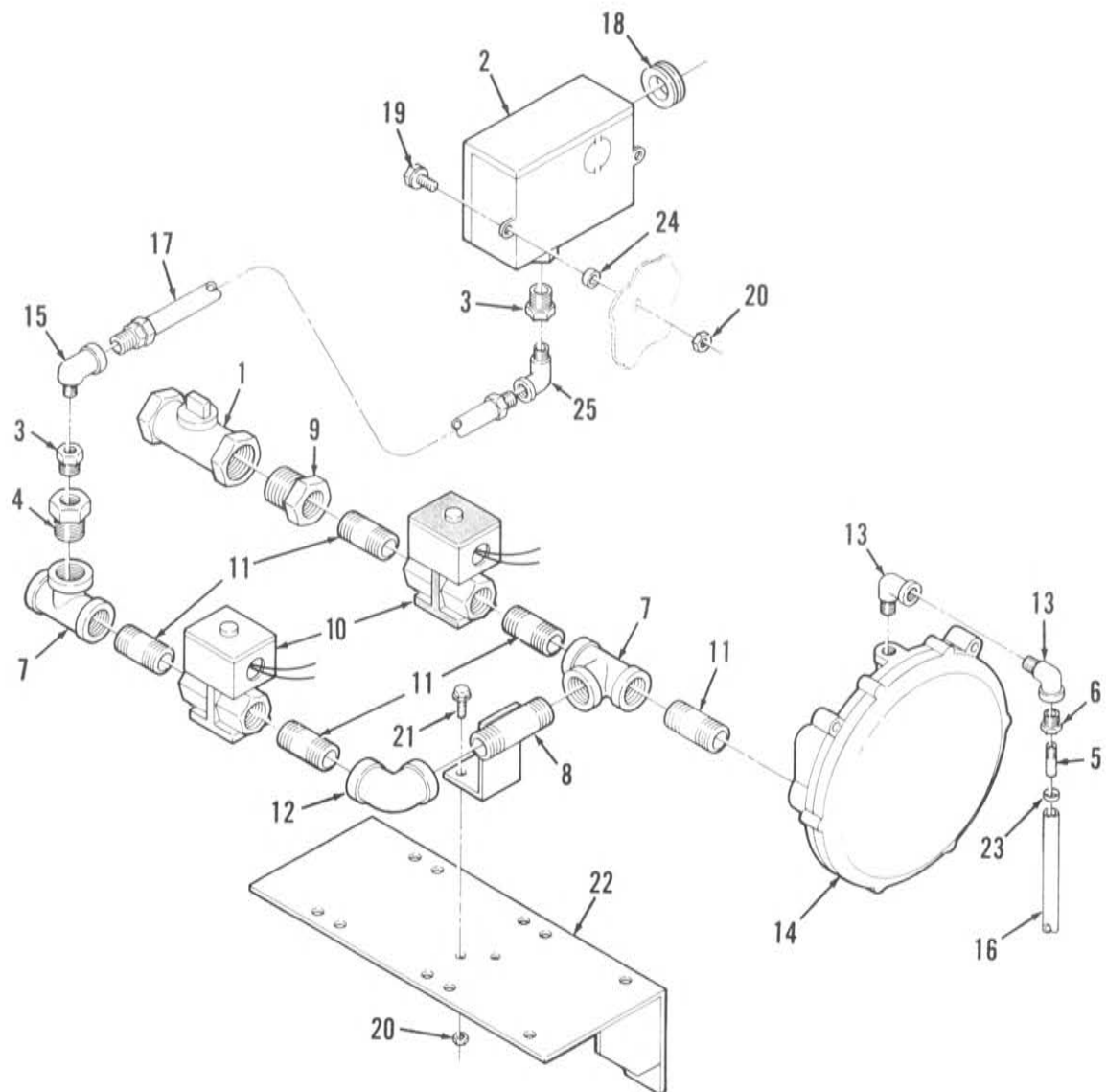
FUEL SYSTEM (GAS, GAS-GASOLINE AND LPG) — OPTIONAL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	REGULATOR, GAS	1	Algas Manufacturing - Order 148-0311
2	CARBURETOR (See Separate Group for Components)	1	Garretson Manufacturing
			Spec A through Q
	141-0757	1	Gas and LPG
	141-0758	1	Gas - Gasoline - Spec A through K Also Order 153-0430 Thermo-Magnetic Choke Kit
			Begin Spec R
	141-0889	1	Gas and LPG
	141-0886	1	Gas - Gasoline
3	503-0159	1	Hose, Regulator to Carburetor
4	503-0032	2	Clamp, Hose
5	148-0519	1	Connector, Hose
6	505-0101	1	Nipple, Pipe (3/8" X Close)
7	505-0039	1	Elbow, Pipe (3/8" X 90°)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
8	505-0128	1	Bushing, Reducer (1-1/4" x 3/8") Algas Regulator
9	148-0107	1	Vent, Regulator
10	504-0007	1	Valve, Fuel Pump Inlet - Gas- Gasoline Sets
11	307-0615	1	Primer Assembly, Solenoid (Algas Regulator)
12	149-0638	1	Plate, Fuel Pump Hole - Gas and LPG Sets
13	505-0057	1	Plug, Pipe - Square Head (1/8") Garretson Regulator
14	143-0231	1	Spring, Wire - Choke Stop (Gas - Gasoline Sets)
15	502-0020	1	Elbow, Street (90°) Brass (Fuel Pump Inlet) Gas - Gasoline Sets
16	502-0002	1	Elbow, Inverted Male - Brass (Fuel Pump Outlet) Gas - Gasoline Sets

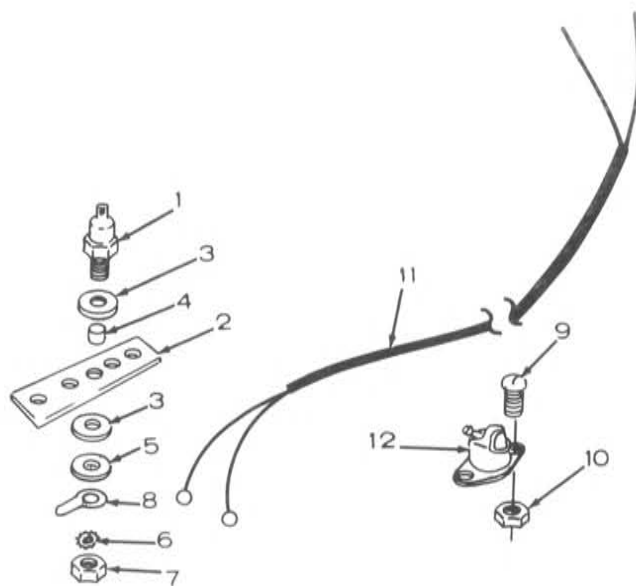
FUEL SYSTEM (LPG AND NATURAL GAS) - OPTIONAL



865C

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	148-0626	1	Valve, Control (Propane Inlet)	14	148-0311	1	Regulator, Gas
2	148-0627	1	Switch, Pressure	15	502-0002	1	Elbow, Inverted Male (1/4" Tube x 1/8" Pipe)
3	505-0007	2	Reducer (1/4" to 1/8")	16	503-1559	1	Hose, Gas Fuel (1/2" ID x 43")
4	505-0020	1	Reducer (3/4" to 1/4")	17	501-0005	1	Hose, Fuel (3/16" ID x 18-1/2")
5	505-0302	1	Nipple, Half (1/4" x 1-1/2")	18	508-0071	1	Grommet, Rubber (7/8" Hole)
6	505-0017	1	Reducer (3/8" x 1/4")	19	821-0018	2	Screw, Self-Locking - Hex Washer Head (1/4-20 x 5/8")
7	505-0166	2	Tee, Pipe (3/4")	20	870-0212	4	Nut, Locking (1/4-20)
8	110-0810	1	Bracket	21	821-0011	2	Screw, Self-Locking - Hex Washer Head (1/4-20 x 7/8")
9	505-0129	1	Reducer (1" x 3/4")	22	140-1753	1	Bracket, Mounting
10	307-0312	2	Valve, Magnetic - 12 VDC	23	503-0183	1	Clamp, Hose (#10)
	307-0829	1	Kit, Coil - Replacement (For above valve)	24	370-4008	2	Spacer
11	505-0102	5	Nipple, Pipe (3/4" x 1-3/8")	25	502-0020	1	Elbow, Street - 90° (1/8")
12	505-0132	1	Elbow - 90° (3/4")				
13	505-0120	2	Elbow, Street - 90° (3/8")				

HIGH AIR TEMPERATURE SWITCH - OPTIONAL



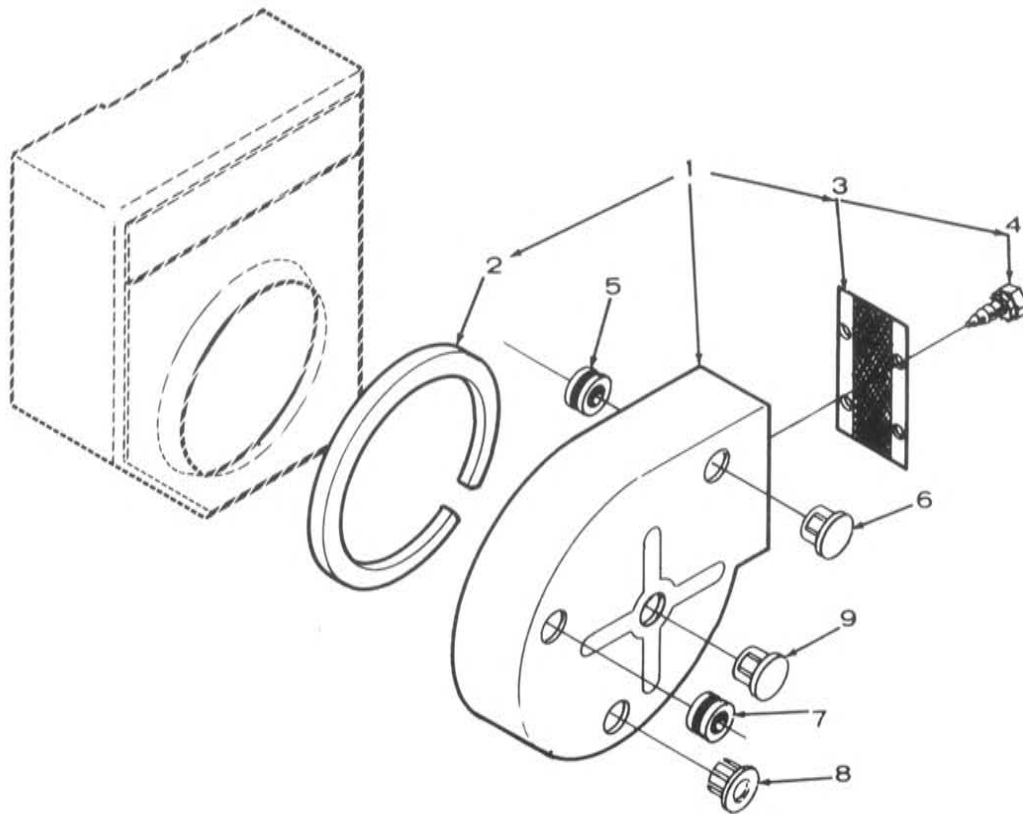
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	SWITCH, HIGH AIR TEMPERATURE		
	309-0196	1	*Sets Without High Air Temperature Indicator Lamp
	309-0206	1	*Sets With High Air Temperature Indicator Lamp
2	309-0195	1	*Bracket, Mounting
3	508-0126	4	*Washer, Insulating
4	508-0127	1	*Insulator, Sleeve
5	526-0021	1	*Washer, Flat (17/64" ID x 3/4" OD x 1/16" Thk)
6	856-0006	1	*Washer, Lock - EIT (1/4")
7	862-0001	1	*Nut, Hex (1/4-20)
8	332-0876	1	*Terminal, Ground
9	812-0076	2	#Screw, Machine - Round Head (#8-32 x 5/16")
10	870-0221	2	#Nut, Hex - With ET (#8-32)
11	338-0337	1	#Harness, Wiring
12	SWITCH, HIGH AIR TEMPERATURE		
	309-0162	1	‡Used on Air Duct and Shutter - Spec A through K (External Springs) Used on Vacu-Flo Cooling Scroll
	309-0162	1	# Sets Without High Air Temperature Indicator Lamp
	309-0171	1	# Sets With High Air Temperature Indicator Lamp

* - Sets with Switch Mounted on Exhaust Manifold.

- Sets with Switch Mounted on Vacu-Flo Cooling Scroll.

‡ - Sets with Switch Mounted on Air Duct and Shutter - Spec A through K (External Springs).

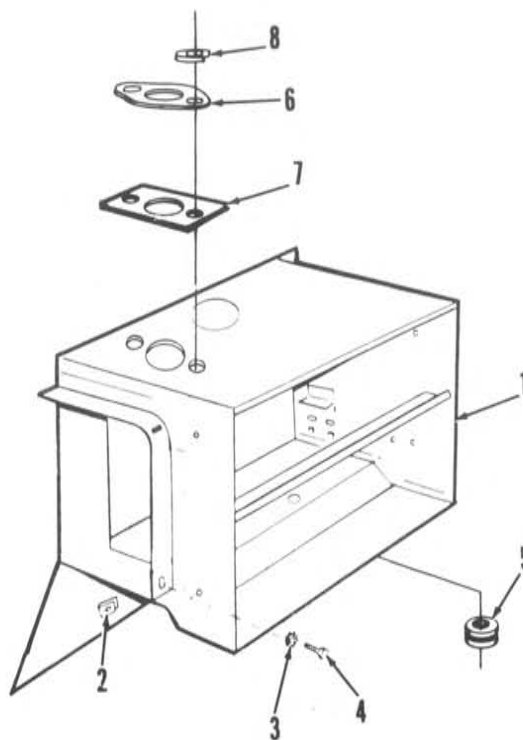
VACU-FLO COOLING — OPTIONAL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	CONVERSION KIT, FIELD — Vacu-Flo Cooling		
	134-1832	1	Spec A through Q
	134-1939	1	Begin Spec R
1	134-1521	1	Scroll Assembly (Includes Parts Marked *)
2	895-0126	1	*Stripping, Seal
3	134-3081	1	*Guard, Scroll Outlet
4	815-0421	4	*Screw, Sheet Metal - Hex Head With ET (#10-16 x 1/2")
5	508-0002	1	Grommet, Rubber (1/2" Hole) High Air Temperature Switch Leads
6	517-0112	2	Plug, Plastic (1" Hole)
7	508-0117	1	Grommet, Rubber (1" Hole) Governor Adjust Opening
8	517-0021	3	Plug, Dot Button (7/8" Hole) Scroll Mounting Opening
9	517-0150	1	Plug, Nylon (1-3/16" Hole) Scroll Center Opening

* - Parts Included in 134-1521 Scroll Assembly.

AIR DUCT — OPTIONAL

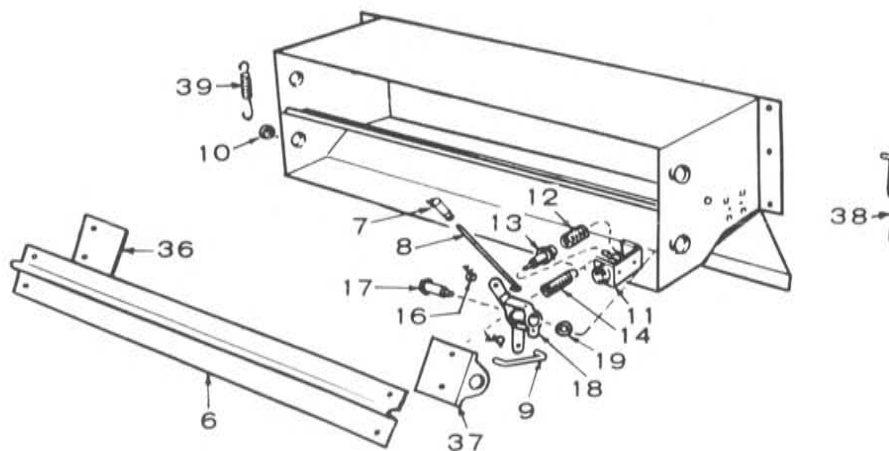
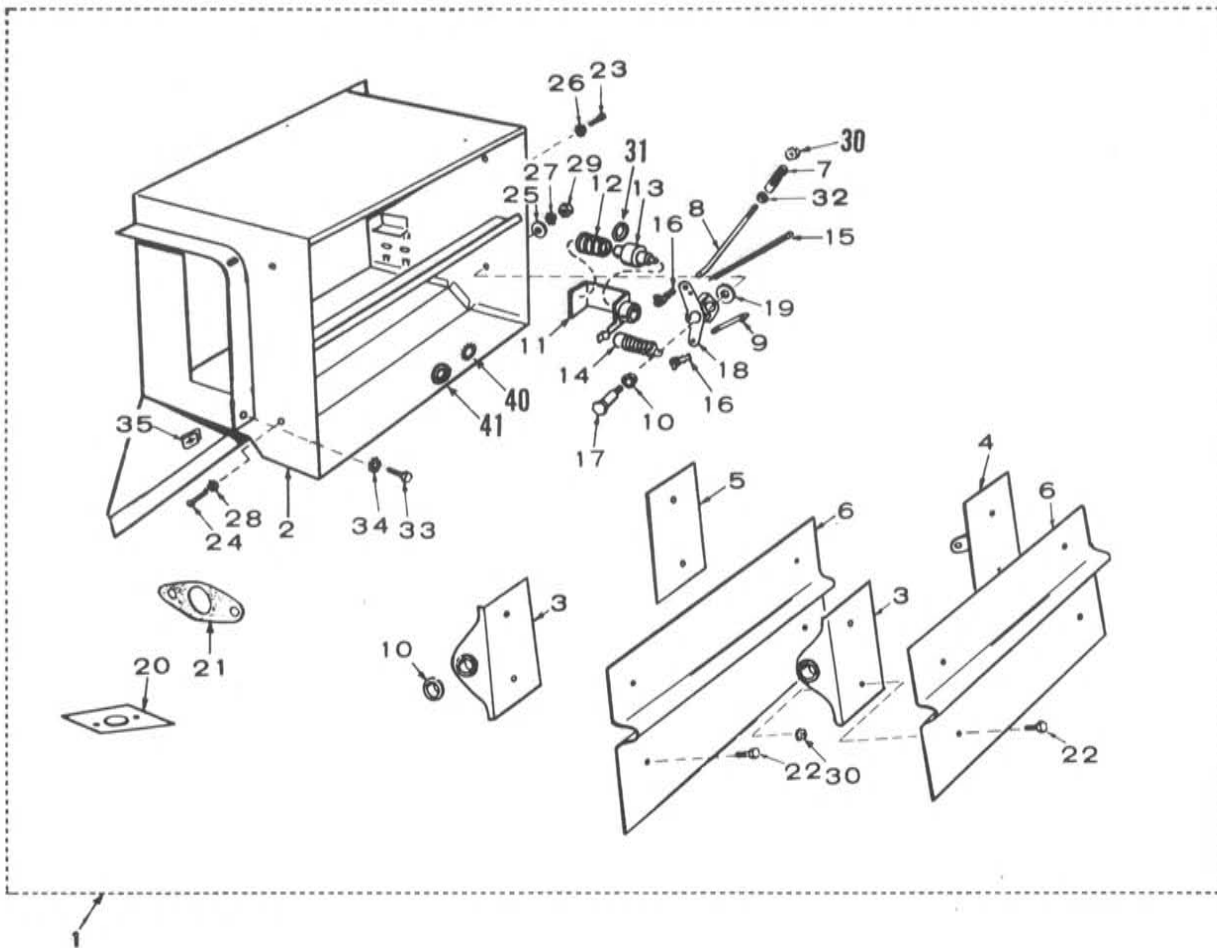


M 1153-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	134-3756	1	Duct Kit, Air (Includes Parts Marked *)
2	870-0178	3	*Nut, Speed - Sheet Metal (1/4-20)
3	853-0013	3	*Washer, Lock - ET (1/4")
4	815-0235	3	*Screw, Cap - Hex Head, Pointed End (1/4-20 x 5/8")
5	508-0002	1	*Grommet, Rubber (1/2" Hole)
6	154-0738	1	*Gasket, Exhaust
7	134-1375	1	*Plate, Exhaust
8	850-0050	2	*Washer, Lock - Spring (3/8")

* - Parts Included in 134-3756 Air Duct Kit.

AIR DUCT AND SHUTTER (HOUSED SETS) — OPTIONAL



AIR DUCT AND SHUTTER (HOUSED SETS) — OPTIONAL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	134-3754	1	Duct and Shutter Kit, Air - Complete Replacement for Sets With Air Duct and Shutter Assembly With External or Internal Springs (Includes Parts Marked *)	22	815-0194	8	*Screw, Cap - Hex Head With ET (#10-32 x 3/8")
2	134-3756	1	*Duct Kit, Air (NOTE: Cannot be used on early model shutter assembly with external shutter pivot springs) Includes Parts Marked #.	23	813-0097	2	*Screw, Machine - Round Head (#10-32 x 5/16")
3	134-2411	2	*Bracket and Pivot, Shutter	24	821-0010	4	*Screw, Cap - Hex Head Locking (1/4-20 x 1/2")
4	134-1802	1	*Bracket and Pivot, Shutter and Rod	25	526-0113	1	*Washer, Flat - Actuating Arm Bearing
5	134-1801	1	*Bracket and Pivot, Shutter and Spring	26	853-0008	2	*Washer, Lock - ET (#8)
6	SHUTTER, AIR OUTLET			27	853-0016	1	*Washer, Lock - ET (5/16")
	134-1237	2	+Spec A through K	28	856-0006	4	*Washer, Lock - EIT (1/4")
	134-1614	2	*£Begin Spec L	29	862-0015	1	*Nut, Hex (5/16-18)
7	150-1358	1	*£+Joint, Ball	30	870-0131	9	*Nut, Hex - ET (#10-32)
8	134-1606	1	*£Rod, Shutter Control (Upper)	31	526-0175	2	*Washer, Flat (41/64" ID x 29/32" OD x 1/16" Thk) Vernatherm Element to Spring
9	134-1607	1	*£Rod, Shutter Control (Lower)	32	870-0053	1	*Nut, Hex (#10-32)
10	BEARING			33	815-0235	3	*#Screw, Cap - Hex Head (1/4-20 x 5/8")
			Sets With Internal Shutter Springs	34	853-0013	3	*#Washer, Lock - ET (1/4")
	134-2900	4	* Shutter	35	870-0178	3	*#Nut, Speed (1/4-20)
	134-1248	2	* Actuating Arm	36	BRACKET AND PIVOT - Sets With External Shutter Springs		
			Sets With External Shutter Springs	134-1242	3	+Spec A through K Begin Spec L	
	134-1248	4	+ Spec A through K	134-1242	2	£ Without Control Rod Bracket	
	134-1248	6	£ Begin Spec L	134-1612	1	£ With Control Rod Bracket	
11	BRACKET AND GUIDE, VERNATHERM			37	BRACKET, SHAFT AND PIN - Sets With External Shutter Springs		
	134-1244	1	+Spec A through K	134-1238	1	Spec A through K	
	134-1610	1	*£Begin Spec L	134-1611	1	Begin Spec L	
12	134-0656	1	*£+Spring, Vernatherm Element	38	134-1247	1	+Rod, Shutter Control
13	309-0085	1	*£+Element, Vernatherm	39	134-1437	2	£+Spring, External - Shutter Pivot
14	134-0658	1	*£+Spring, Shutter Return - Lower	40	850-0050	2	*#Washer, Lock - Spring (3/8") Engine Air Outlet Duct
15	134-1817	1	*Spring, Shutter Return - Upper	41	508-0002	1	*#Grommet, Rubber (1/2" Hole) Air Duct
16	CLIP, ROD END						
	518-0004	1	*£+Right Side				
	518-0006	2	*£Left Side - Begin Spec L				
17	134-1605	1	*£Shaft, Actuating Arm				
18	134-1604	1	*£Arm, Actuating				
19	WASHER, FLAT - Begin Spec L						
	526-0213	1	*21/64" ID x 1" OD x 1/8" Thk - Sets With Internal Shutter Springs				
	526-0045	1	£21/64" ID x 5/8" OD x 1/8" Thk - Sets With External Shutter Springs				
20	134-1375	1	*£#Plate, Exhaust Outlet				
21	154-0738	1	*£#Gasket, Exhaust Outlet Plate				

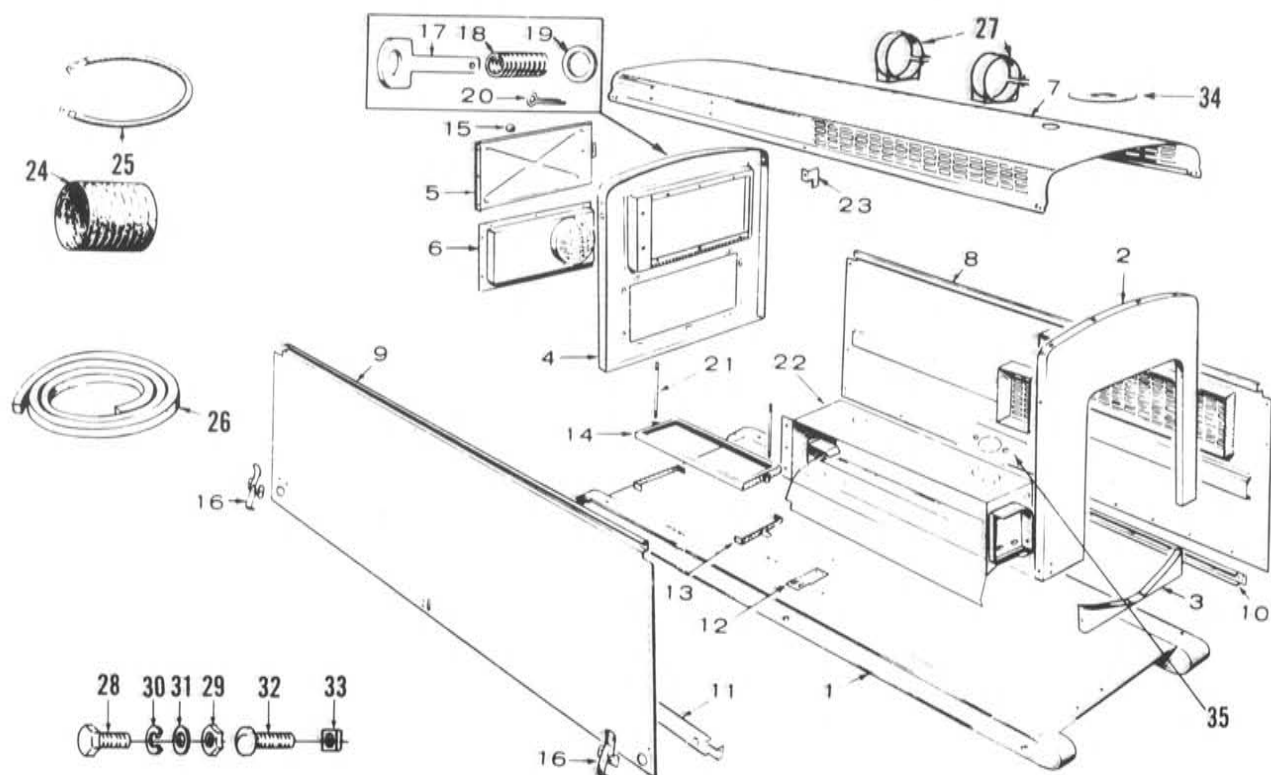
* - Parts Included in 134-3754 Air Duct and Shutter Kit (With Internal Shutter Springs)

- Parts Included in 134-3756 Air Duct Kit

+ - Parts that apply to Air Duct and Shutter Assembly with External Shutter Springs used Spec A through K. For complete replacement order 134-3754 Air Duct and Shutter Kit.

£ - Parts that apply to Air Duct and Shutter Assembly with External Shutter Springs used begin Spec L until the use of Air Duct and Shutter Assembly with internal shutter springs. For complete replacement order 134-3754 Air Duct and Shutter Kit.

HOUSING AND SKID BASE — OPTIONAL



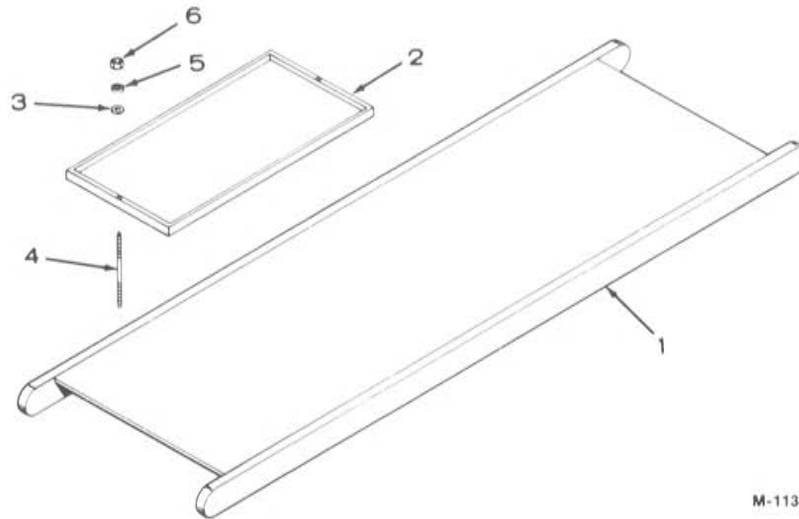
M 1353

HOUSING AND SKID BASE — OPTIONAL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	HOUSING KIT, CONVERSION		
	405-2248	1	With Duct, Without Meter Panel
	405-2249	1	With Duct and Shutters, Without Meter Panel
	405-2247	1	With Duct and Meter Panel
	405-2255	1	With Duct and Shutters, and Meter Panel
1	403-0661	1	Base, Skid
2	PANEL, FRONT - UPPER (Engine End)		
	405-1323	1	Sets Without Oil Bath Air Cleaner
	405-1651	1	Sets With Oil Bath Air Cleaner
3	405-1333	1	Panel, Front - Lower (Engine End)
4	PANEL, REAR (Generator End)		
	405-1322	1	Sets WITHOUT Meter Panel
	405-1331	1	Sets WITH Meter Panel
5	PANEL, DOOR - REAR END		
	405-1329	1	Sets WITHOUT Meter Panel
	405-1332	1	Sets WITH Meter Panel
6	405-1330	1	Panel, Generator Access
7	405-1326	1	Panel, Top
8	PANEL, RIGHT SIDE		
	405-1342	1	Sets WITHOUT Shutters
	405-1352	1	Sets WITH Shutters
9	405-1325	1	Panel, Left Side
10	405-1327	1	Rail, Stiffener - Right Side
11	405-1328	1	Rail, Stiffener - Left Side
12	405-1341	2	Bracket, Stiffener Rail
13	416-0501	2	Bracket, Battery Support
14	416-0502	1	Frame, Battery Hold-down
15	406-0002	1	Knob, Rear End Door Panel
16	406-0105	2	Fastener, Housing Hold-down
17	405-1138	2	Pin, Shoulder - Rear End Panel
18	405-1139	2	Spring, Shoulder Pin - Rear End Panel
19	526-0115	2	Washer, Flat (11/32" ID x 11/16 OD x 1/16" Thk)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
20	516-0039	2	Pin, Cotter (3/32 x 5/8")
21	520-0490	2	Stud, Battery Hold-down (5/16 x 8-13/16")
22	DUCT, EXHAUST MANIFOLD (See Separate Group for Components)		
	134-3756	1	Sets Without Shutters
	134-3754	1	Sets With Shutters
23	405-1181	2	Stop, Door
24	503-0423	1	Hose, Flexible - Generator Air Duct
25	336-0476	1	Strap, Ground - Engine to Frame
26	895-0104	1	Stripping, Foam Weather - (76")
27	BAND, MUFFLER		
	140-0631	2	Used for Mounting 155-0456 (Standard) Muffler
	140-0078	2	Used for Mounting 155-0360 (Critical) Muffler
28	SCREW, CAP - HEX HEAD		
	800-0003	5	1/4-20 x 1/2"
	800-0025	12	5/16-18 x 5/8"
	821-0010	32	1/4-20 x 1/2" (Self-Locking)
	815-0181	14	#10-32 x 1/2" (Thread Cutting With ET)
29	862-0015	18	Nut, Hex (5/16-18)
30	WASHER, LOCK - SPRING		
	850-0045	14	5/16"
	850-0040	5	1/4"
	850-0030	20	#10
31	526-0115	10	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
32	813-0098	20	Screw, Machine - Round Head (#10-32 x 3/8")
33	870-0110	24	Nut, Speed (1/4-20)
34	405-1674	1	Shield, Rain
35	134-1375	1	Plate, Exhaust Outlet Cover

SKID AND BATTERY RACK — OPTIONAL

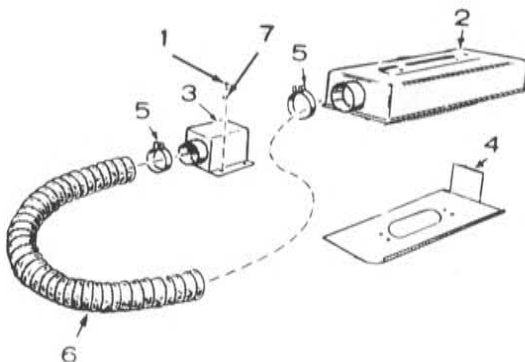


M-1134

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	403-0661	1	Skid
2	416-0502	1	Frame, Battery
3	526-0115	2	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
4	520-0490	2	Stud, Battery Frame
5	850-0045	2	Washer, Lock - Spring (5/16")
6	862-0015	6	Nut, Hex (5/16-18)

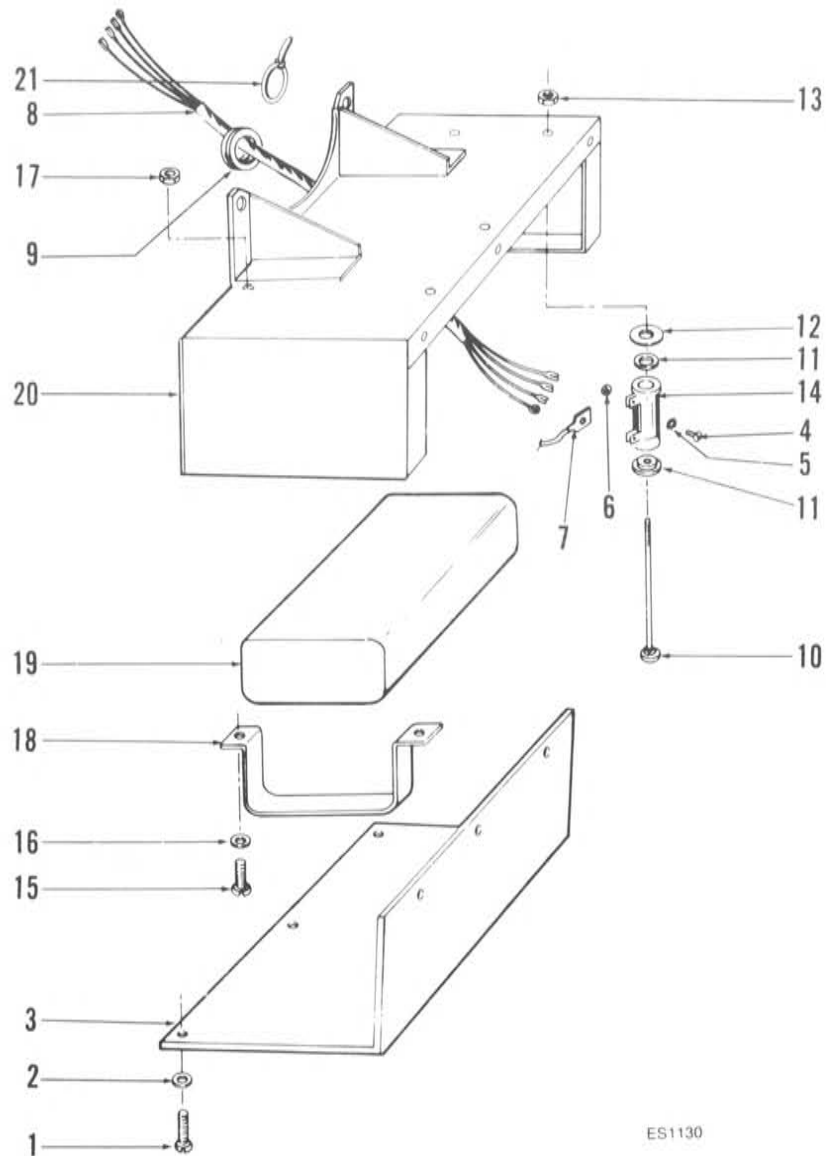
CARBURETOR AIR HEATER (SPEC A THROUGH N) — OPTIONAL (GASOLINE SETS)

NOTE: For complete replacement refer to Carburetor Air Heater Group Begin Spec P — Order by carburetor air heater kit number.



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	815-0048	4	Screw, Round Head - Self Tapping (#10-32 x 3/8")
2	140-0650	1	Cover, Air Cleaner (Hot Air)
3	140-0654	1	Box, Air Outlet (Shutter)
4	140-0658	1	Cover, Air Cleaner Pan
5	503-0004	2	Clamp, Hose
6	503-0397	1	Hose, Hot Air
7	854-0010	4	Washer, Lock - IT (#10)

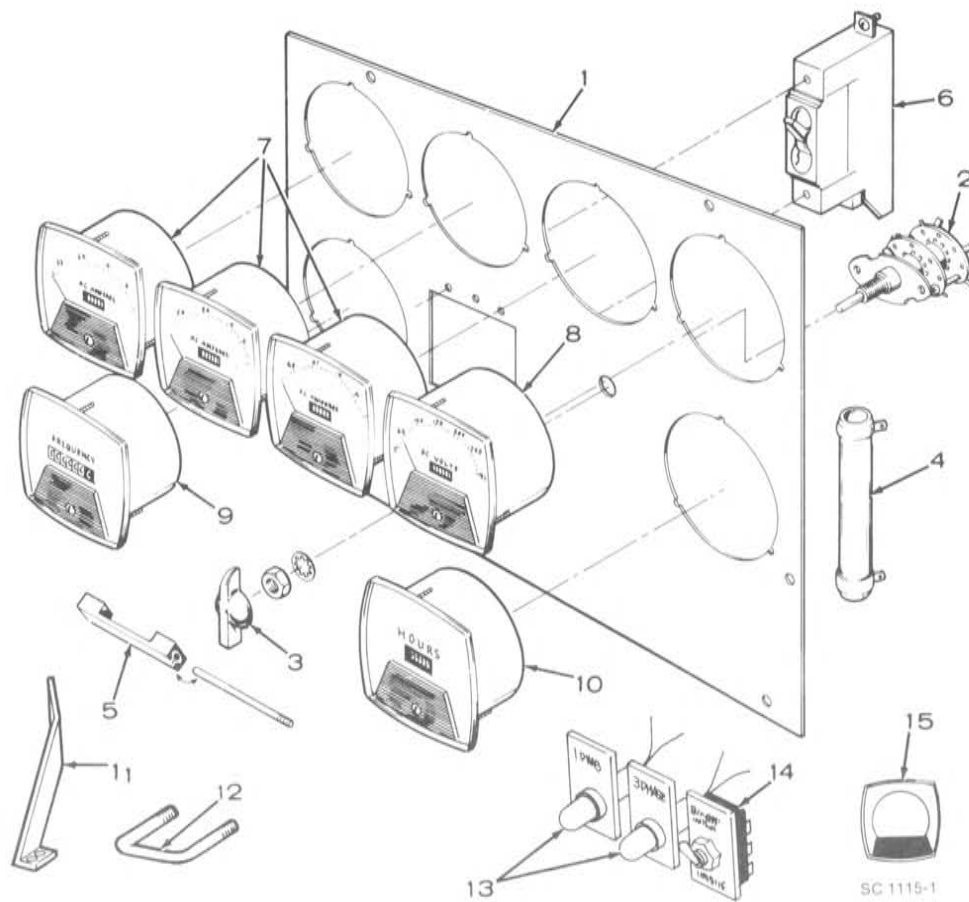
VOLTAGE REGULATOR FILTER - OPTIONAL



ES1130

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	813-0098	6	Screw, Machine - Round Head (#10-32 x 3/8")	12	304-0292	2	Insulator, Resistor
2	850-0030	6	Washer, Lock - Spring (#10)	13	870-0053	2	Nut, Hex (#10-32)
3	232-2463	1	Cover, Housing	14	304-0120	2	Resistor, Fixed (2 Ohm, 25 Watt)
4	815-0001	4	Screw, Machine - Binding Head Brass (#6-32 x 1/4")	15	812-0079	4	Screw, Machine - Round Head (#8-32 x 1/2")
5	853-0003	4	Washer, Lock - ET (#6)	16	850-0025	4	Washer, Lock - Spring (#8)
6	860-0006	4	Nut, Hex (#6-32)	17	860-0008	4	Nut, Hex (#8-32)
7	332-1279	4	Terminal, Lug	18	312-0198	2	Bracket, Mounting - Capacitor
8	338-1165	1	Harness, Wiring	19	312-0197	1	Capacitor
9	508-0071	1	Grommet, Rubber	20	232-2462	1	Housing, Filter
10	813-0112	2	Screw, Machine - Round Head (#10-32 x 2-1/2")	21	332-0942	2	Tie, Cable
11	304-0015	4	Washer, Centering		625-1304	—	Diagram, Wiring

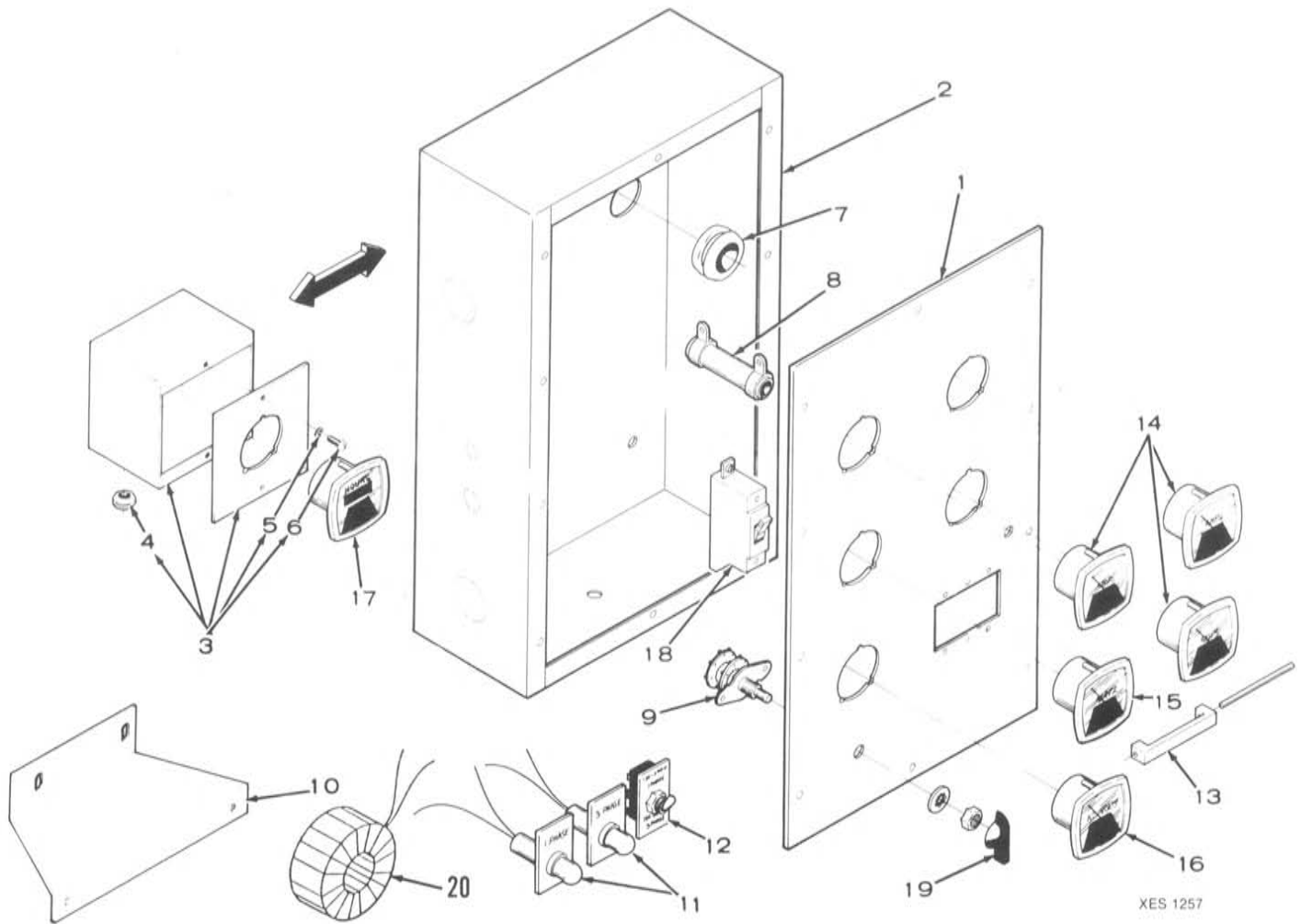
AC METER PANEL (HOUSED SETS) — OPTIONAL



AC METER PANEL (HOUSED SETS) — OPTIONAL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PANEL, METER — Begin Spec AA (Spec A through Z Supply Complete Model, Specification Number and Serial Number)			6	BREAKER, CIRCUIT (Select According to Existing Breaker)		
			120/208 Volt				Single Pole
	301-2088	1	Sets Without Frequency Meter and Running Time Meter		320-0150	As Req.	20 Amp, 480 Volt
	301-2204	1	Sets With Frequency Meter and Running Time Meter		320-0019	As Req.	25 Amp, 120/240 Volt
			120/240 Volt		320-0151	As Req.	25 Amp, 480 Volt
			Single Phase Sets		320-0020	As Req.	35 Amp, 120/240 Volt
	301-1554	1	Sets Without Frequency Meter and Running Time Meter		320-0153	As Req.	40 Amp, 120/240 Volt
	301-2288	1	Sets With Frequency Meter and Running Time Meter		320-0198	As Req.	45 Amp, 120/240 Volt
			Three Phase Sets		320-0052	As Req.	50 Amp, 120/240 Volt
	301-2088	1	Sets Without Frequency Meter and Running Time Meter		320-0195	As Req.	55 Amp, 120/240 Volt
	301-2204	1	Sets With Frequency Meter and Running Time Meter		320-0021	As Req.	60 Amp, 120/240 Volt
			220/380 Volt		320-0366	As Req.	65 Amp, 120/240 Volt
	301-2373	1	Sets Without Frequency Meter and Running Time Meter		320-0148	As Req.	70 Amp, 120/240 Volt
	301-2308	1	Sets With Frequency Meter and Running Time Meter		320-0367	As Req.	75 Amp, 120/240 Volt
			240/416 Volt		320-0251	As Req.	100 Amp, 120/240 Volt
	301-2308	1	Sets With Frequency Meter and Running Time Meter				Three Pole Companion
			277/480 Volt		320-0514	As Req.	15 Amp, 600 Volt
	301-2373	1	Sets Without Frequency Meter and Running Time Meter		320-0486	As Req.	20 Amp, 480 Volt
	301-2308	1	Sets With Frequency Meter and Running Time Meter		320-0459	As Req.	20 Amp, 600 Volt
			347/600 Volt		320-0487	As Req.	25 Amp, 480 Volt
	301-3736	1	Sets With Frequency Meter and Running Time Meter		320-0488	As Req.	30 Amp, 480 Volt
			Broad Range Sets	7	AMMETER, AC (Select According to Scale)		
	301-3732	1	Sets With Frequency Meter and Running Time Meter		302-0460	As Req.	Scale Reads 0-20
2	308-0012	1	Switch, Selector - Voltmeter (3 Phase Sets)		302-0418	As Req.	Scale Reads 0-30
3	303-0076	1	Knob, Selector Switch - 3 Phase Sets		302-0444	As Req.	Scale Reads 0-35
4	RESISTOR, FIXED				302-0419	As Req.	Scale Reads 0-50
	304-0305	1	277/480 Volt Sets (45,000 Ohm, 10 Watt)		302-0458	As Req.	Scale Reads 0-80
	304-0536	1	600 Volt Sets (9,000 Ohm, 50 Watt)		302-0410	As Req.	Scale Reads 0-150
5	BAR, CIRCUIT BREAKER TIE			8	VOLTMETER, AC (Select According to Scale)		
	320-0187	1	Sets With 3 Circuit Breakers		302-0420	1	Scale Reads 0-150
	320-0202	1	Sets With 2 Circuit Breakers		302-0421	1	Scale Reads 0-300
					302-0612	1	Scale Reads 0-500
					302-0422	1	Scale Reads 0-600
					302-0423	1	Scale Reads 0-750
				9	METER, FREQUENCY (Check Meter Face for Part Number)		
							50 Hertz
					302-0234	1	100-150 Volt
					302-0256	1	200-250 Volt
					302-0825	1	480 Volt
					302-0788	1	600 Volt
							60 Hertz
					302-0213	1	100-150 Volt
					302-0221	1	200-250 Volt
					302-0716	1	480 Volt
					302-0717	1	600 Volt
				10	METER, RUNNING TIME (Check Meter Face for Part Number)		
							50 Hertz
					302-0468	1	120 Volt
					302-0469	1	240 Volt
					302-0470	1	480 Volt
							60 Hertz
					302-0465	1	120 Volt
					302-0466	1	240 Volt
					302-0467	1	480 Volt
				11	301-2395	1	Bracket, Panel Stop - Broad Range Sets
				12	301-2727	1	Handle, Control Panel - Broad Range Sets
				13	322-0044	2	Light, Neon Pilot - Red Lens (Indicates 1 Phase or 3 Phase in Operation) Broad Range Sets
				14	308-0203	1	Switch, Selector - Output Phase (Broad Range Sets)
				15	302-0448	1	Plate, Meter Face (Used on Early Style Round Meters)

SWITCHBOARD CONTROL (UNHOUSED SETS) — OPTIONAL

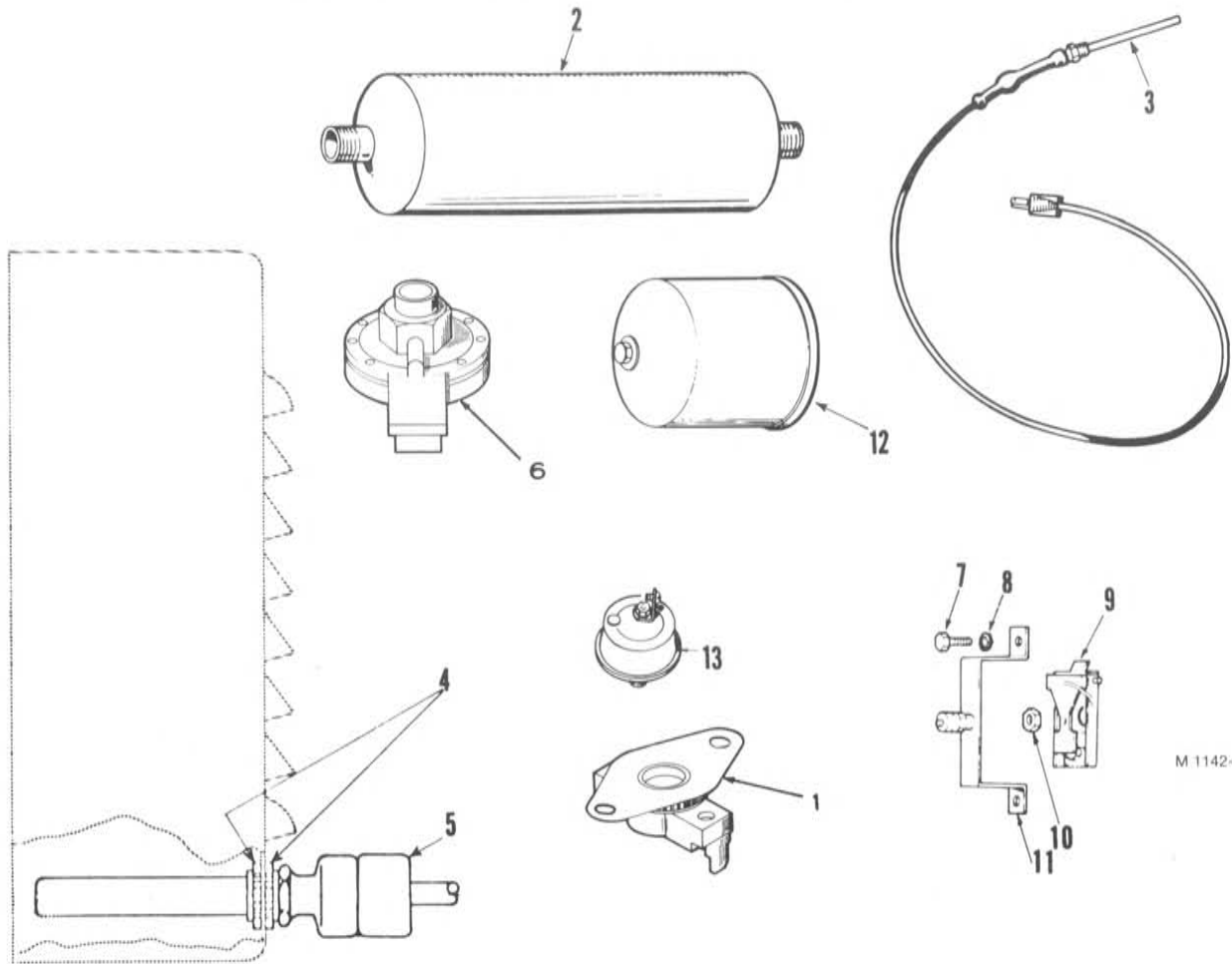


SWITCHBOARD CONTROL (UNHOUSED SETS) — OPTIONAL

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PANEL, INSTRUMENT - Begin Spec AA (Spec A through Z Supply Complete Model, Specification Number and Serial Number)			14	AMMETER, AC (Select According to Scale)		
301-8776			120 Volts	302-0460	As Req.	Scale Reads 0-20	
			120/208 Volts	302-0418	As Req.	Scale Reads 0-30	
301-2077	1		Sets Without Frequency Meter and Running Time Meter	302-0444	As Req.	Scale Reads 0-35	
301-2099	1		Sets With Frequency Meter and Running Time Meter	302-0419	As Req.	Scale Reads 0-50	
			120/240 Volt	302-0458	As Req.	Scale Reads 0-80	
			Single Phase Sets	302-0410	As Req.	Scale Reads 0-150	
301-2085	1		Sets Without Frequency Meter and Running Time Meter	15	METER, FREQUENCY (Select According to Hertz and Volts)		
301-2086	1		Sets With Frequency Meter and Running Time Meter <i>5 Holes 2CB</i>			50 Hertz	
			Three Phase Sets	302-0234	1	100-150 Volt	
301-2077	1		Sets Without Frequency Meter and Running Time Meter	302-0256	1	200-250 Volt	
301-2099	1		Sets With Frequency Meter and Running Time Meter <i>5 Holes 3CB</i>	302-0893	1	208 Volt	
301-2116	1		220/380 Volts	302-0825	1	480 Volt	
301-2116	1		277/480 Volts	302-0788	1	600 Volt	
301-2681	1		347/600 Volts			60 Hertz	
301-3741	1		Board Range Sets	302-0213	1	100-150 Volt	
2	BOX, INSTRUMENT			302-0221	1	200-250 Volt	
301-2027	1		All Except Broad Range Sets	302-0809	1	208 Volt	
301-2304	1		Broad Range Sets	302-0716	1	480 Volt	
3	BOX ASSEMBLY (Meter or Circuit Breaker)			302-0717	1	600 Volt	
	(Not used on all models)			16	VOLTMETER, AC (Select According to Scale)		
301-0500	1		Sets With One Meter (Includes Parts Marked *)	302-0420	1	Scale Reads 0-150	
301-0994	1		Sets With Two Meters (Includes Parts Marked *)	302-0421	1	Scale Reads 0-300	
320-0458	1		Sets With Circuit Breaker Enclosure	302-0612	1	Scale Reads 0-500	
4	508-0008	1	*Grommet, Rubber (13/16" Hole)	302-0422	1	Scale Reads 0-600	
5	850-0030	2	*Washer, Lock - Spring (#10)	302-0423	1	Scale Reads 0-750	
6	811-0098	2	*Screw, Machine - Round Head Brass (10-32 x 3/8")	17	METER, RUNNING TIME (Check Existing Meter for Part Number)		
7	508-0009	1	Grommet, Rubber (1-3/8" Hole)			50 Hertz	
8	304-0536	1	Resistor - Running Time Meter (600 Volt Sets) 9000 Ohm, 50 Watt	302-0468	1	120 Volt	
9	308-0012	1	Switch, Selector - Voltmeter (3 Phase Sets)	302-0469	1	240 Volt	
10	301-2076	1	Bracket, Mounting - Instrument Box (Bottom) Spec A through Z	302-0470	1	480 Volt	
11	322-0044	2	Light, Neon Pilot — Red Lens (Indicates 1 Phase or 3 Phase in Operation) Broad Range Sets			60 Hertz	
12	308-0203	1	Switch, Selector - Output Phase (Broad Range Sets)	302-0465	1	120 Volt	
13	BAR, CIRCUIT BREAKER TIE			302-0466	1	240 Volt	
320-0187	1		Sets With 3 Circuit Breakers	302-0467	1	480 Volt	
320-0202	1		Sets With 2 Circuit Breakers	18	BREAKER, CIRCUIT (Select According to Existing Breaker)		
						Single Pole	
				320-0020	As Req.	35 Amp, 120/240 Volt	
				320-0153	As Req.	40 Amp, 120/240 Volt	
				320-0198	As Req.	45 Amp, 120/240 Volt	
				320-0052	As Req.	50 Amp, 120/240 Volt	
				320-0195	As Req.	55 Amp, 120/240 Volt	
				320-0021	As Req.	60 Amp, 120/240 Volt	
				320-0366	As Req.	65 Amp, 120/240 Volt	
				320-0148	As Req.	70 Amp, 120/240 Volt	
				320-0367	As Req.	75 Amp, 120/240 Volt	
				320-0251	As Req.	100 Amp, 120/240 Volt	
				320-0357	As Req.	125 Amp, 120 Volt	
						Three Pole Companion	
				320-0514	As Req.	15 Amp, 600 Volt	
				320-0486	As Req.	20 Amp, 480 Volt	
				320-0459	As Req.	20 Amp, 600 Volt	
				320-0487	As Req.	25 Amp, 480 Volt	
				320-0488	As Req.	30 Amp, 480 Volt	
				19	303-0076	1	Knob, Selector Switch - 3 Phase Sets
				20	302-0079	1	Transformer (120V, 1 Phase Sets)

* - Parts Included in Meter Box Assemblies.

MISCELLANEOUS OPTIONAL PARTS



M 1142-1

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	309-0270	1	Thermostat, Low Engine Temperature
2	155-0360	1	Muffler, Critical - Housed Sets
3	102-0558	1	Heater, Oil Base
4	331-0041	2	Nut, Lock (1/2") Begin Spec AA
5	333-0184	1	Heater, Generator Space - Begin Spec AA
6	148-0367	1	Switch, Vacuum - Gas and Gas-Gasoline Sets Begin Spec B
7	SCREW 813-0100	2	Machine - Round Head (#10-32 x 1/2") Spec A through Z
	800-0003	2	Cap - Hex Head (1/4-20 x 1/2") Begin Spec AA

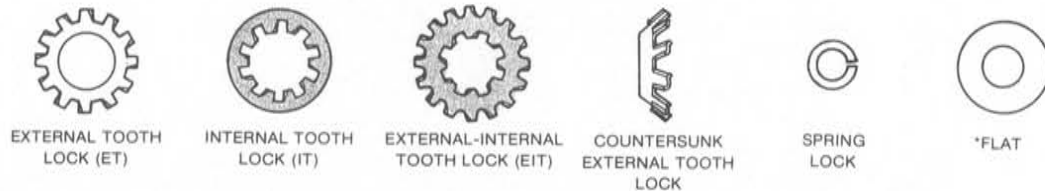
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
8	WASHER, LOCK - SPRING 850-0030	2	#10 - Spec A through Z
	850-0040	2	1/4" - Begin Spec AA
9	SWITCH, OVERSPEED 150-0956	1	60 Hertz Sets
	150-1661	1	50 Hertz Sets
10	868-0004	1	Nut, Jam - Hex Head (7/16-20)
11	BRACKET AND POINT ASSEMBLY 150-0958	1	Spec A through Z
	150-1446	1	Begin Spec AA
12	122-0193	1	Filter, Oil - Heavy Duty (5-3/4")
13	SWITCH, LOW OIL PRESSURE 309-0064	1	Spec A through F
	309-0169	1	Begin Spec G

309-0206 (NOT IN BOOK)
High AIR Temp. Cut out Switch

HARDWARE IDENTIFICATION

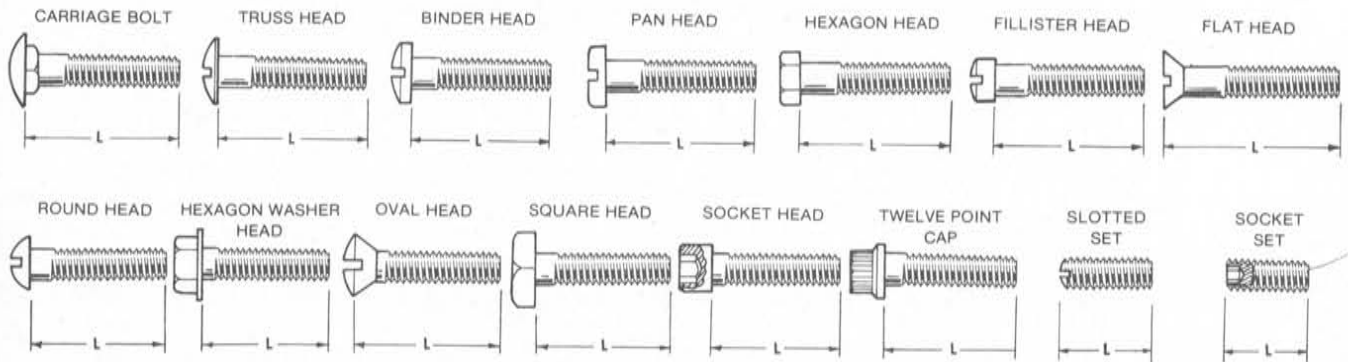
Illustrated hardware items are only for identification purposes. All hardware items listed throughout this parts catalog are steel SAE grade five (5) or lower (zinc plated with clear chromate dip) unless parts description indicates differently. All dimensions are in inches.

WASHER TYPES



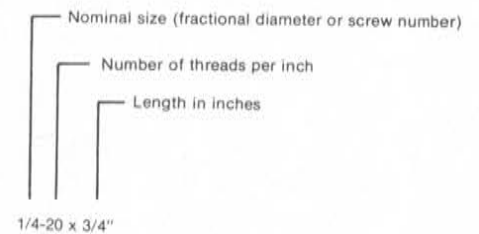
* - Flat washer dimensions given are: Inside Diameter (ID), Outside Diameter (OD) and Thickness (Thk).

BOLT AND SCREW TYPES



L - Measure length between these points.

INTERNAL DRIVE TYPES



NUT TYPES





Onan Corporation
1400 73rd Avenue N.E.
Minneapolis, Minnesota 55432

Telephone: (612) 574-5000
Telex: 275477
Cable ONAN